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(FILE 'HOME' ENTERED AT 12:55:45 ON 30 OCT 2004)

FILE 'REGISTRY' ENTERED AT 12:55:59 ON 30 OCT 2004

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 15 S L1 OR L2

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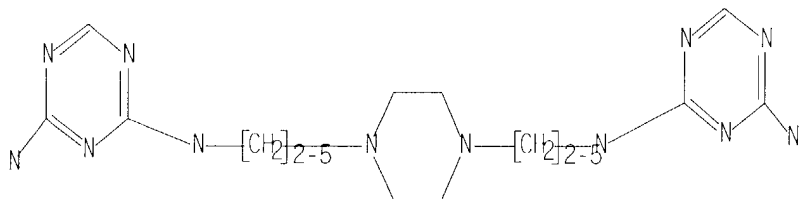
L4 212 S L3 FULL

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L5 40 S L4

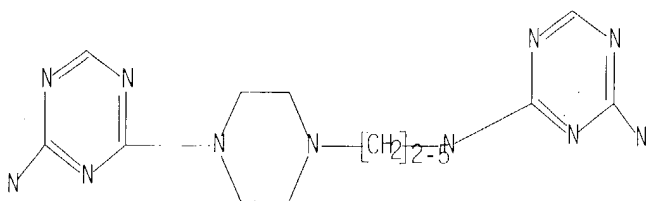
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L1 STR



Structure attributes must be viewed using STN Express query preparation.

L2 STR



Structure attributes must be viewed using STN Express query preparation.

L4 212 SEA FILE=REGISTRY SSS FULL L1 OR L2

L5 40 SEA FILE=CAPLUS ABB=ON PLU=ON L4

=> d 1-40 bib abs hitstr

LS ANSWER 1 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:413024 CAPLUS
 UN 140:408229
 TI Mixtures of reactive azo dyes, their production and their use in dyeing of material containing hydroxy- and/or carboxamido groups
 IN Ebenezzer, Warren James; Russ, Werner
 PA Dystar Textilfarben G.m.b.H. & Co. Deutschland K.-G., Germany
 SO PCT Int. Appl., 26 pp.
 CODEN: PIXSD2

DT Patent

LA English

FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 200401941	A1	20040521	WO 2003-EP12271	20031101
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OC, OZ, PA, PE, PG, PH, PI, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TH, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZH, ZM, ZW, AM, AZ, BY, BG, BR, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SC, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GU, GO, GV, HL, HR, HE, SM, TD, TG				
RW: BR, GH, GN, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZH, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SC, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GU, GO, GV, HL, HR, HE, SM, TD, TG				

PRA1 GB 2002:26151 A 20021108

OS MARPAT 140:408229

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are reactive azo dye mixts. comprising one or more of I (Ar1-sulfonyl; M = H, alkali metal; X1 = labile atom or group) and one or more of II (Ar2-sulfonyl; M = H, alkali metal; L = mono- or divalent radical; X2 = labile atom or group; a = 1 or 2). The mixts. provide strong and economic shades on fibrous materials. In an example, 2-aminoethylpiperazine and ethylenediamine were condensed with a dichlorotriazinyl dye to give a red 1:1 mixture of dyes of type I and type II.

IT 220211-72-3P

RL: INF (Industrial manufacture); TEN (Technical) or engineered material use); PREP (Preparation); USES (Uses)

(red dye; production of reactive azo dye mixts. containing)

RI 220211-72-3 CAPLUS

LS ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:36726 CAPLUS
 UN 140:95572
 TI Reactive azo dyes, their production and their use
 IN Ebenezzer, Warren James; Russ, Werner
 PA Dystar Textilfarben G.m.b.H. & Co. Deutschland K.-G., Germany
 SO Eur. Pat. Appl., 48 pp.
 CODEN: EPXSD2

DT Patent

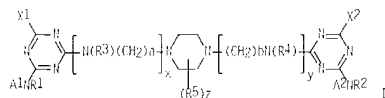
LA English

FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CP 1380621	A1	20040114	EP 2003-15256	20030707
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US 2004107517	A1	20040610	US 2003-611438	20030701
ZA 2003005261	A	20040210	ZA 2003-5261	20030103
BR 2003002363	A	20040624	BR 2003-2363	20030709
JP 2004043809	A2	20040712	JP 2003-195297	20030710
CN 1471139	A	20040225	CN 2003-146641	20030710
PRA1 GB 2002:15982	A	20020710		

OS MARPAT 140:95572

GI



AB The invention discloses reactive azo dyes (I: A1, A2 = aromatic sulfo-containing azo moiety; R1, R2, R3, R4, R5 = H, optionally substituted alkyl; X1, X2 either reactive atom or group; x, y = 0, 1 whereby at least one of x and y is 1; a, b = 2-5 and when each of x and y is 1, a > b; z = 0, 1, 2, 3, 4), processes for their preparation, and their use for dyeing and printing hydroxy- and/or carboxamido-containing fiber materials. I provide strong, bright, and economic shades on textiles. In an example, 1-(2-aminoethyl)piperazine was treated in succession with 2 different monoazo dyes each containing a dichlorotriazinyl group to give a disazo bis(chlorotriazinyl) reactive dye (λmax 491 nm).

IT 644987-54-2P 644987-55-3P 644987-56-4P

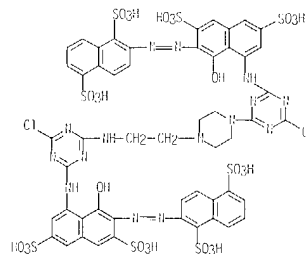
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644987-66-6P 644987-67-7P 644987-68-8P

LS ANSWER 1 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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HC CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RF FORMAT

LS ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

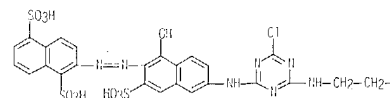
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 644988-61-4P 645405-61-4P 645405-62-5P
 645405-63-6P

RL: INF (Industrial manufacture); TEN (Technical) or engineered material use); PREP (Preparation); USES (Uses)

(dye; prodn. of chlorotriazine reactive dyes contg. piperazine groups)

RI 644987-54-2 CAPLUS

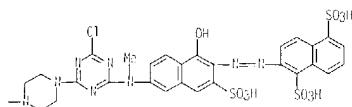
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PAGE 1-A

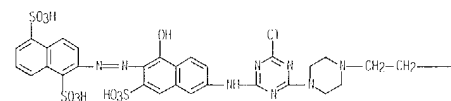
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

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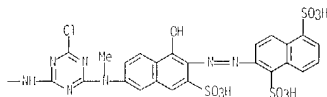


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PAGE 1-A



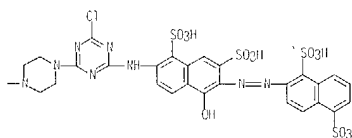
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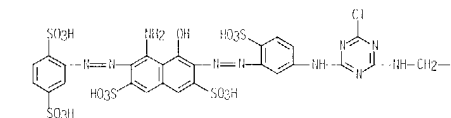
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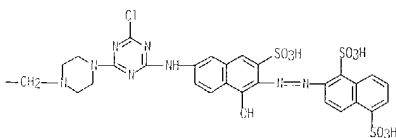


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PAGE 1-A



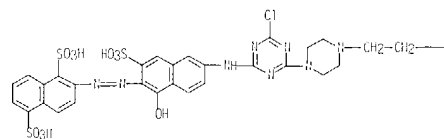
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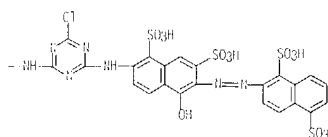
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

PAGE 1-A

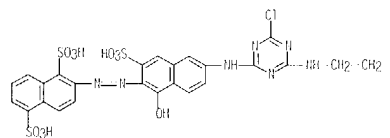


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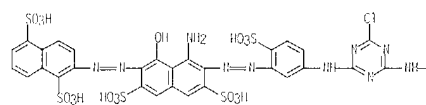
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PAGE 1-A

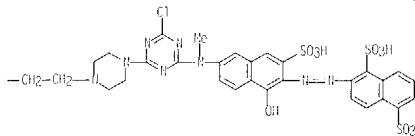


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

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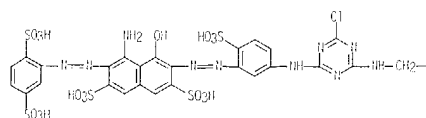


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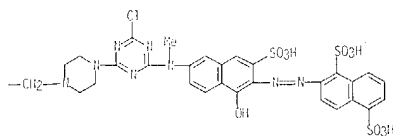
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PAGE 1-A



L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

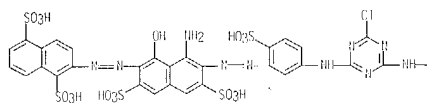
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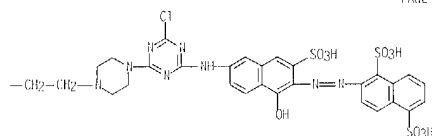
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PAGE 1-A



PAGE 1-B

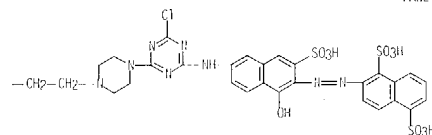


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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

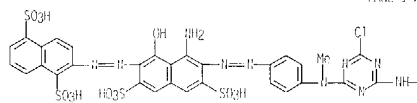
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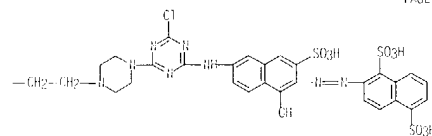
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PAGE 1-B

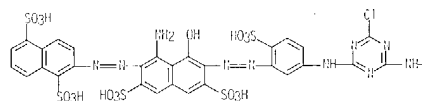


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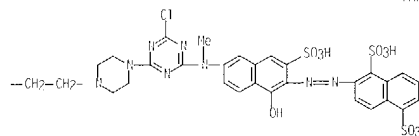
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

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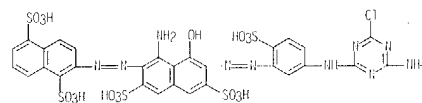
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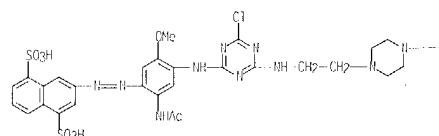
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PAGE 1-A

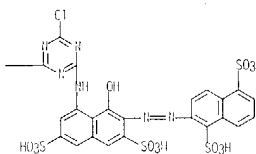


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



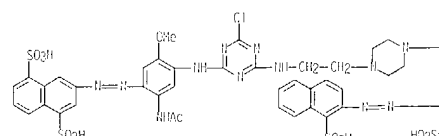
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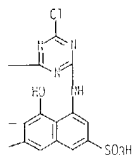
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PAGE 1-A

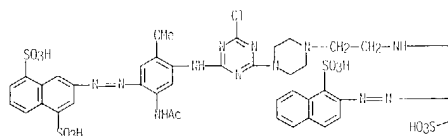


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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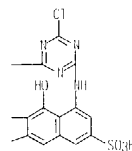


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PAGE 1-A



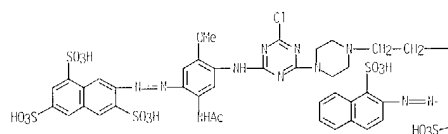
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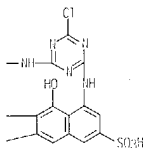
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

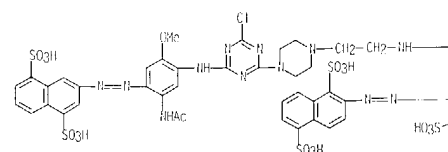


PAGE 1-B



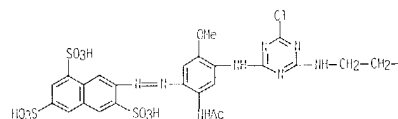
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PAGE 1-A

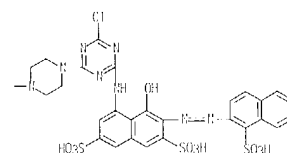


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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PAGE 1-A



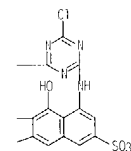
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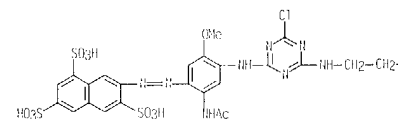
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PAGE 1-B

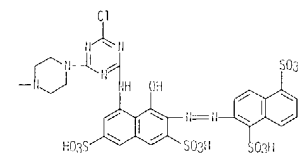


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PAGE 1-A



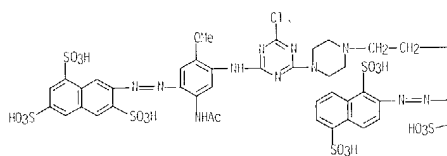
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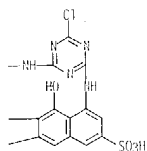
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
INDEX NAME

PAGE 1-A



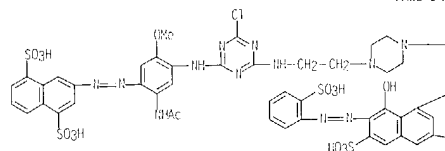
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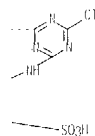
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

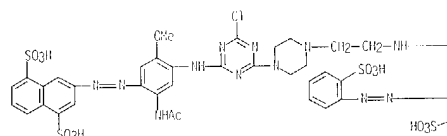


PAGE 1-B



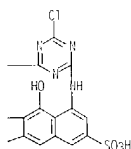
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PAGE 1-A



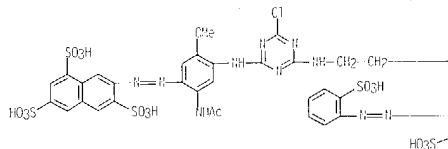
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

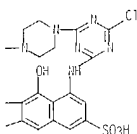


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PAGE 1-A



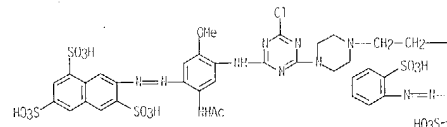
PAGE 1-B



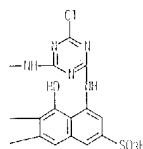
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
[2-[4-chloro-6-[[8-hydroxy-3,6-disulfo-7-[(2-sulfonyl)amino]-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-5-methoxyphenyl]azo]- (9C1) (CA INDEX NAME)

PAGE 1-A

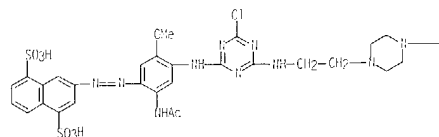


PAGE 1-B



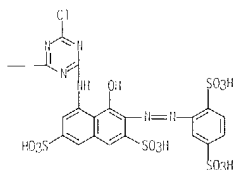
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PAGE 1-A



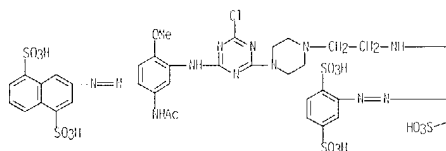
15. ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

PAGE 1-B



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PAGE 1-A

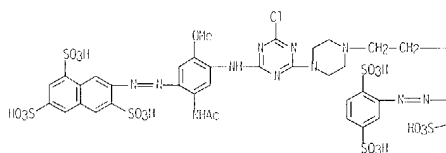


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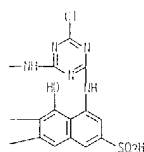
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PAGE 1-A



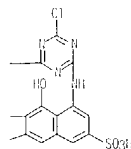
PAGE 1-B



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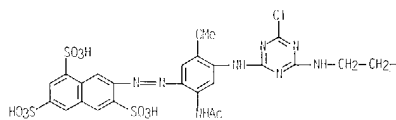
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

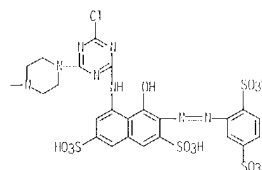


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PAGE 1-A

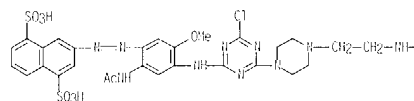


PAGE 1-6

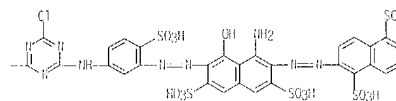


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2001 ACS on STN (Continued)

PAGE 1-A

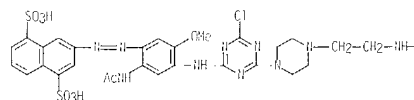


PAGE 1-B

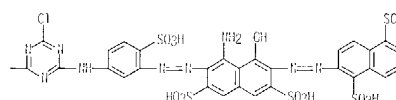


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PAGE 1-A



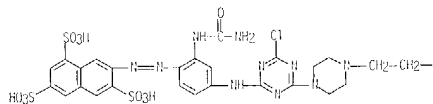
PAGE 1-B



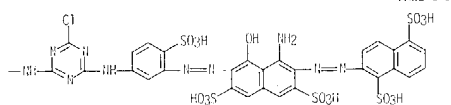
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15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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PAGE 1-A

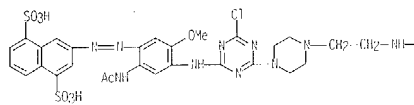


PAGE 1-B



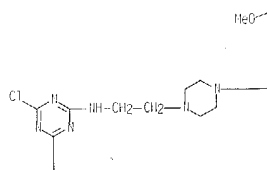
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PAGE 1-A

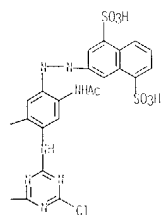


15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

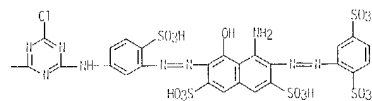


PAGE 1-B



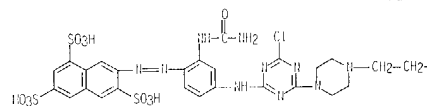
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PAGE 1-B

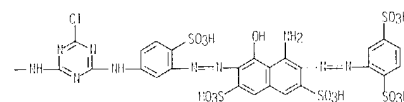


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PAGE 1-A



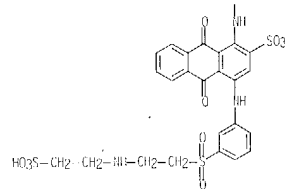
PAGE 1-B



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15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



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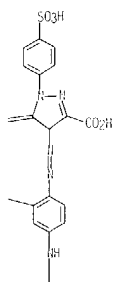
PAGE 1-A

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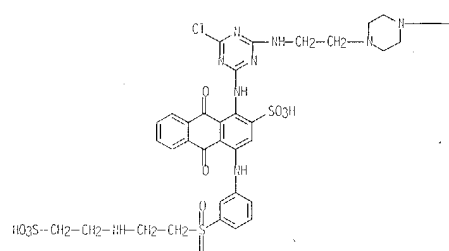
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

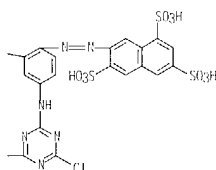


PAGE 2-A

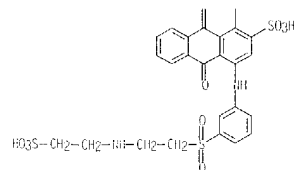


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

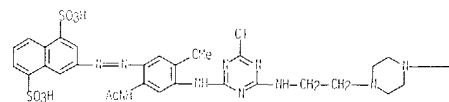


PAGE 2-A



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PAGE 1-A



L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-B

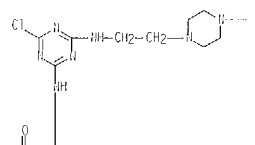
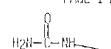


PAGE 3-A



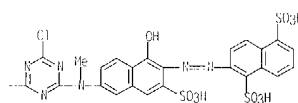
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PAGE 1-A

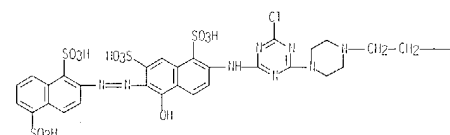


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

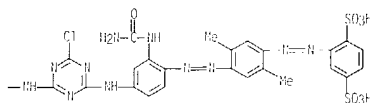
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PAGE 1-A



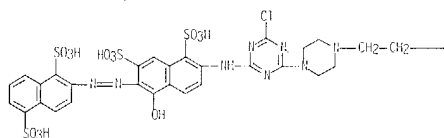
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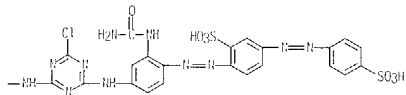
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



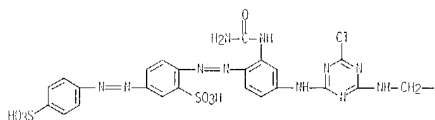
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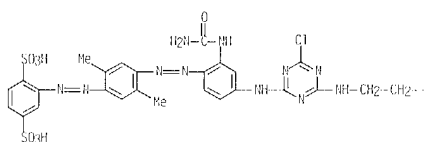
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PAGE 1-A

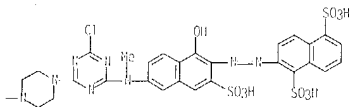


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



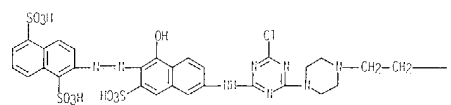
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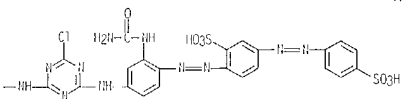
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PAGE 1-A

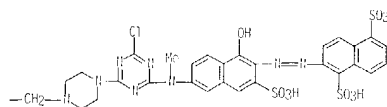


PAGE 1-B



L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

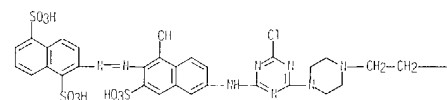
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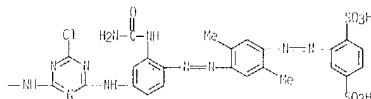
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PAGE 1-A



PAGE 1-B



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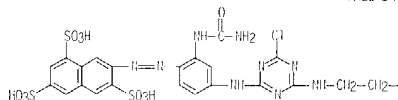
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

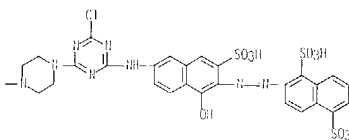
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PAGE 1-A



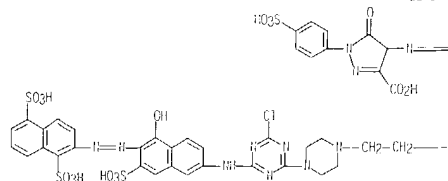
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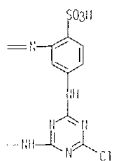
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

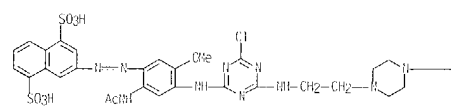
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
6-chloro-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-chloro-1,3,5-triazin-2-yl]amino]-5-methoxyphenyl]azo]- (9C1) (CA INDEX NAME)

PAGE 1-B

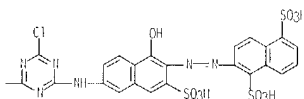


RN 644987-98-1 CAPLUS
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PAGE 1-A



PAGE 1-B



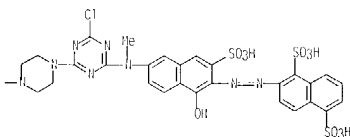
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

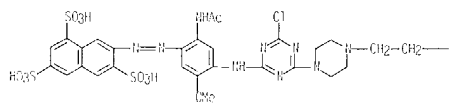
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PAGE 1-A

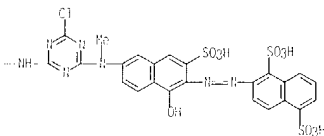


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PAGE 1-A

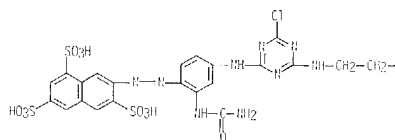


PAGE 1-B

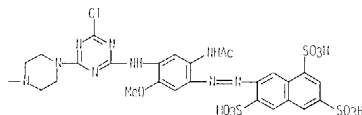


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PAGE 1-A

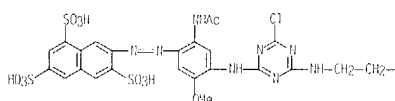


PAGE 1-B

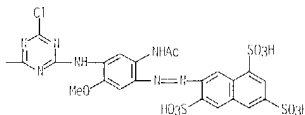


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PAGE 1-A

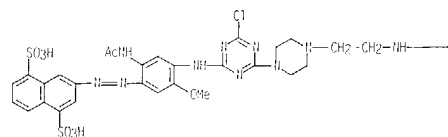


PAGE 1-B



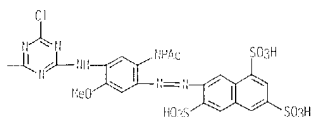
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PAGE 1-A



L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

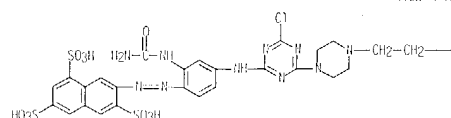
PAGE 1-B



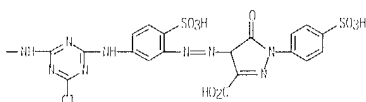
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PAGE 1-A



PAGE 1-B

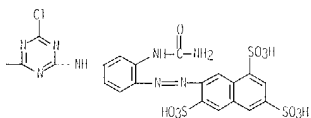


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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

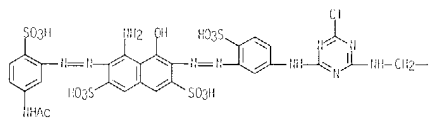
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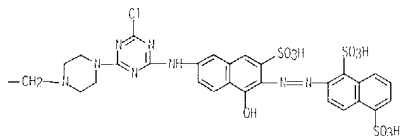
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PAGE 1-A



PAGE 1-B

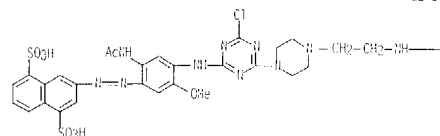


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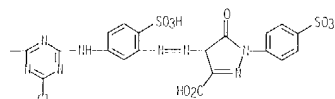
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



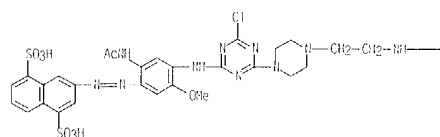
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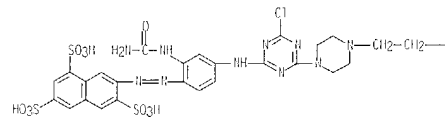
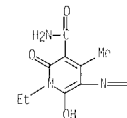
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PAGE 1-A

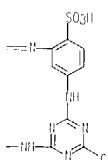


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

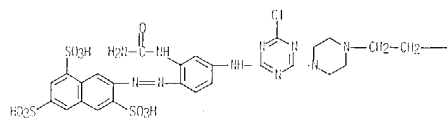
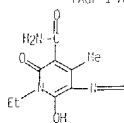


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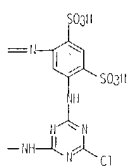
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STI (Continued)

PAGE 1-A



PAGE 1-B

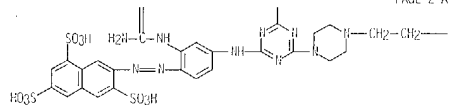


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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STI (Continued)

PAGE 2-A



PAGE 2-B



RN 644988-11-4 CAPLUS

CN 1,3,6-Naphthalenesulfonic acid, 7-[[2-[(aminocarbonyl)amino]-4-[[4-[1-[2-[[1-[1-[1-[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,5-disulfo]phenyl]amino]-6-chloro-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]phenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

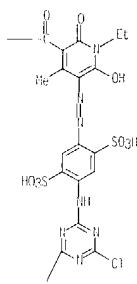
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STI (Continued)

PAGE 1-A

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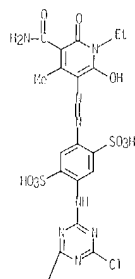


PAGE 1-B

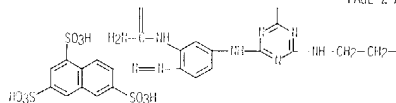


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STI (Continued)

PAGE 1-B



PAGE 2-A



PAGE 2-B

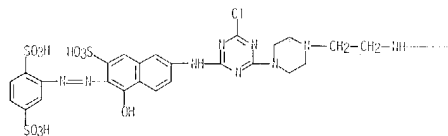


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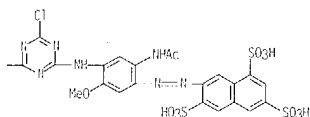
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15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STI (Continued)

PAGE 1-A



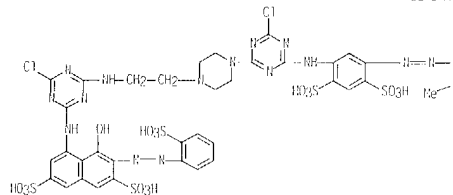
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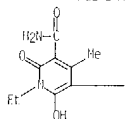
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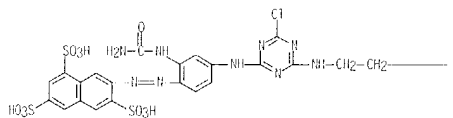
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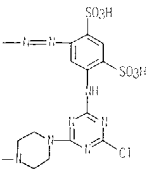
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PAGE 1-B



PAGE 1-A

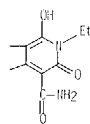


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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STI (Continued)

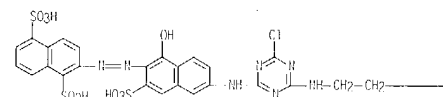
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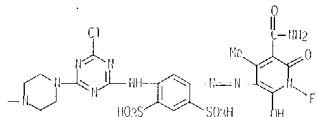
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PAGE 1-A



PAGE 1-B

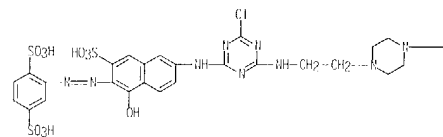


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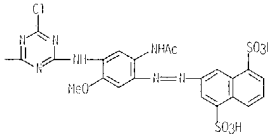
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STI (Continued)

PAGE 1-A



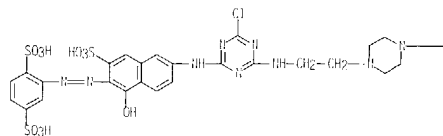
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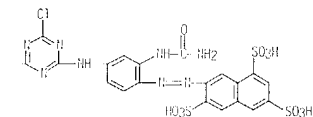
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PAGE 1-A



L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

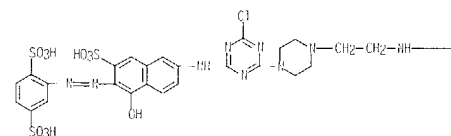
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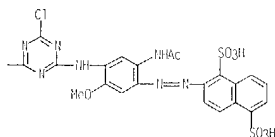
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PAGE 1-A



PAGE 1-B

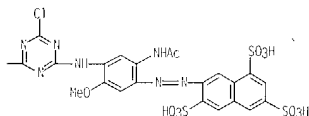


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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

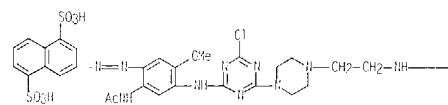
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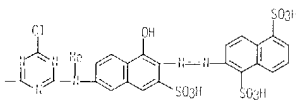
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PAGE 1-A



PAGE 1-B

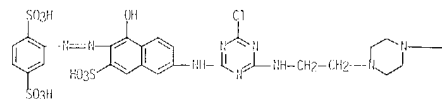


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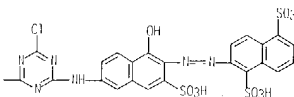
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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PAGE 1-A



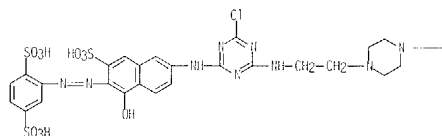
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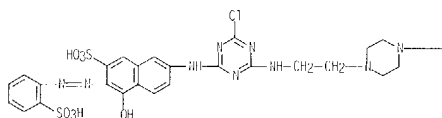
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PAGE 1-A

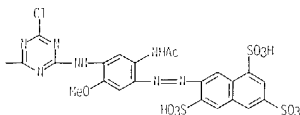


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



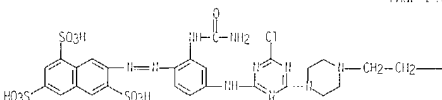
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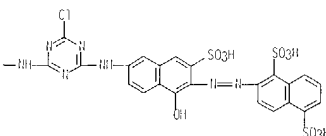
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PAGE 1-A

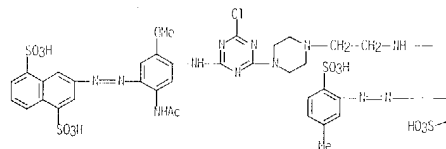


PAGE 1-B

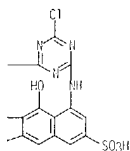


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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PAGE 1-A



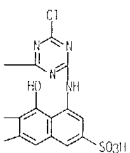
PAGE 1-B



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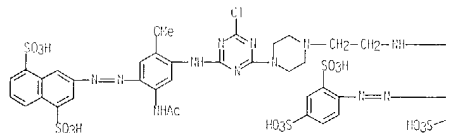
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

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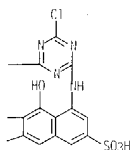


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PAGE 1-A



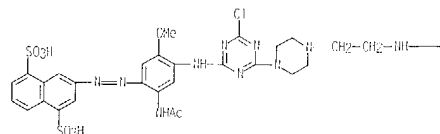
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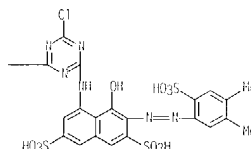
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

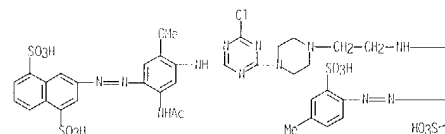


PAGE 1-B



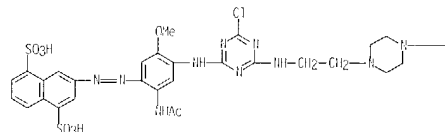
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PAGE 1-A

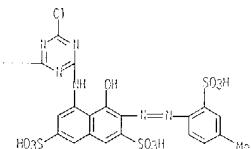


L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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PAGE 1-A

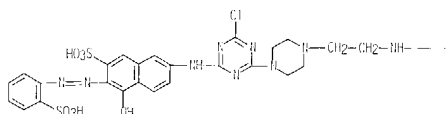


PAGE 1-B

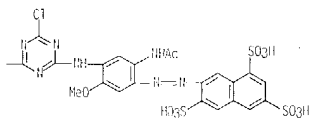


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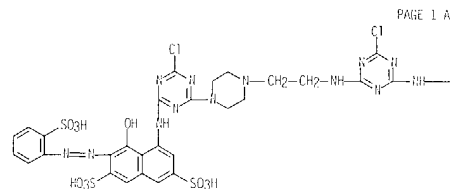
PAGE 1-A



L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
PAGE 1-B

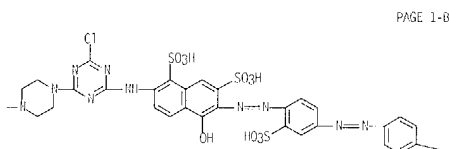
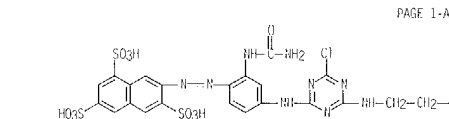


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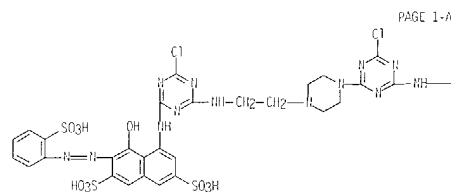
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



PAGE 1-C

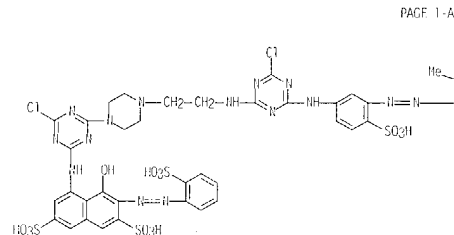
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
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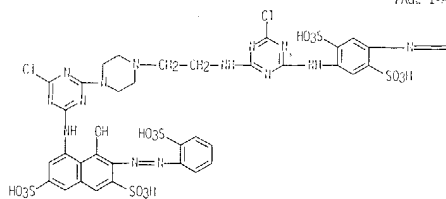
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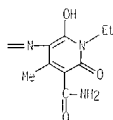
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15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

PAGE 1-A



PAGE 1-B

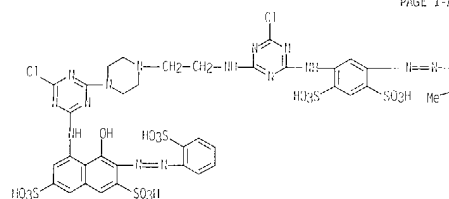


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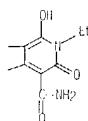
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

PAGE 1-A



PAGE 1-B

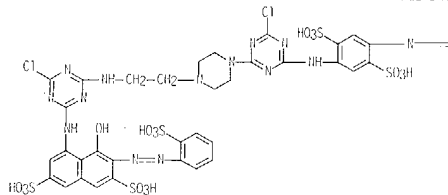


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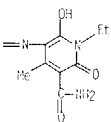
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15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

PAGE 1-A



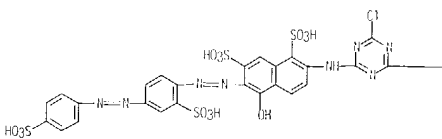
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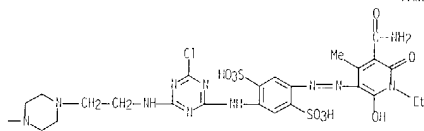
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PAGE 1-A



L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

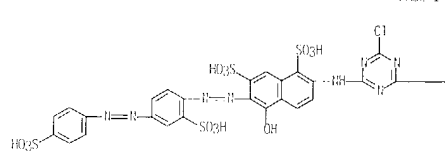
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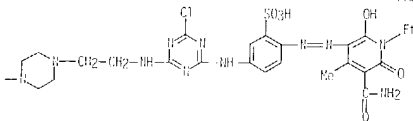
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PAGE 1-A



PAGE 1-B

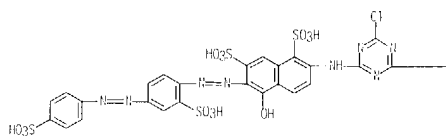


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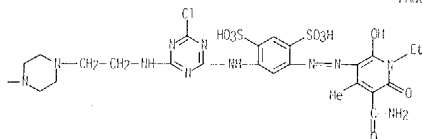
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2001 ACS on STM (Continued)
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PAGE 1-A

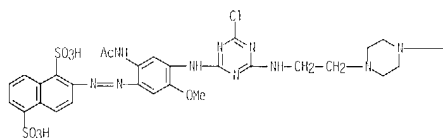


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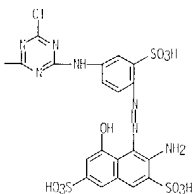
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PAGE 1-A



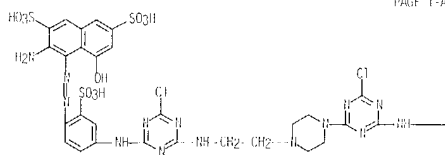
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

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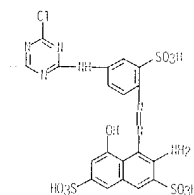
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PAGE 1-A



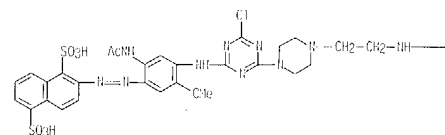
L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

PAGE 1-B



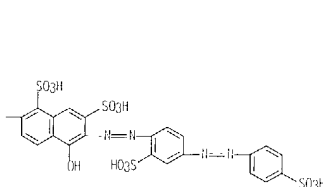
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PAGE 1-A



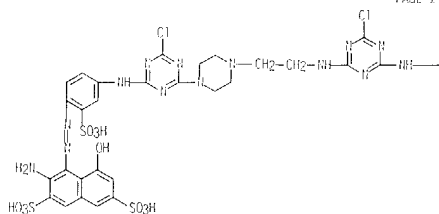
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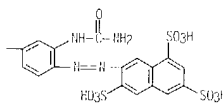


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PAGE 1-A



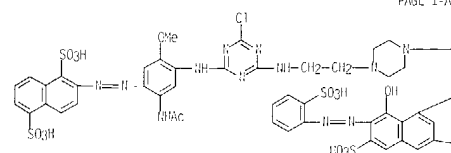
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15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

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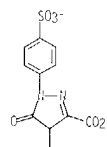


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15 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

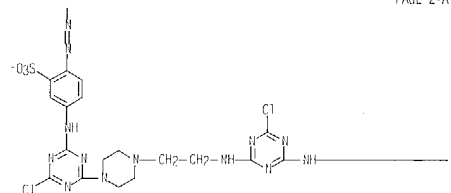


PAGE 1-B



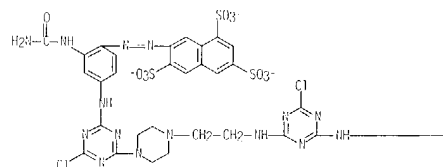
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PAGE 2-A

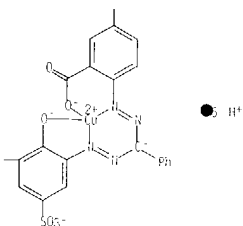


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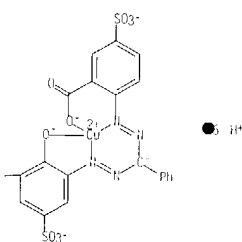
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PAGE 2-B



PAGE 1-B



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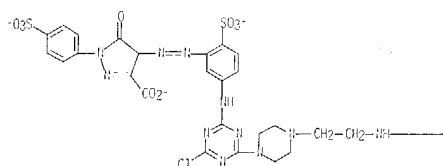
CN Cuprate(6-), [2-[[[3-[[4-[2-[[4-[4-[3-[[[2-(carboxy-κO)-4-sulfonyl]azo-κH2]phenyl]amino]-6-chloro-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]-2-(hydroxy-κO)-5-sulfonyl]azo-κH2]phenylmethyl]azo-κH1]-5-sulfonyl]benzoato(6-)-κO], hexahydrogen (9C1) (CA INDEX NAME)

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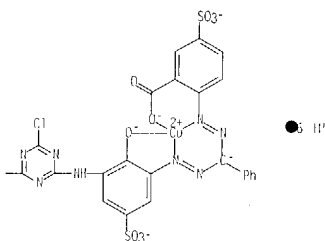
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L5 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



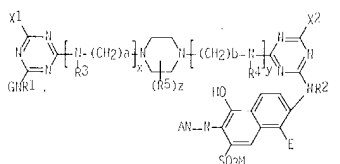
PAGE 1-B



REL. CNT 8 THERE ARE 8 CITFD REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
AI 2002:808029 CAPLUS
DI 137:385992
TI Reactive scarlet azo dyes, their production and their use
IN Ebendorfer, Warren James
PA Dystar Textilfarben G.m.b.H. & Co. Deutschland K.-G., Germany
SO PCT Int. Appl., 20 pp.
CCDEN: PIXXD2
DT Patent
LA English
FAR. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PT WO 2002092697	A1	20021121	WO 2002-EP4908	20020504
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EP 1307865	A1	20040211	EP 2002-753041	20020504
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US 2004138435	A1	20040715	US 2003-477074	20031106
PRAI GB 2001-11573	A	20010511		
WO 2002-EP4908	W	20020504		
US MARPAT 137:385992				
GI				



L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

AB The invention refers to piperazine-based halotriazino reactive disazo dyes (1: A optionally substituted 2-sulfonylphenyl or 1-sulfo-2-naphthyl; L = H, SO₃M: G = arylazohydroxysulfonaphthyl; H = H, ammonium, alkali, alkaline earth metal/2; R1-R5 = H, optionally substituted alkyl; X1, X2 = halogen; a, b = 2-5; x, y = 0, 1; z = 0-4). Scarlet 1 are prepared with 2 different chromophores and have excellent fastness properties. In an example, a dye was prepared starting with 1-(2-aminoethyl)piperazine and condensing with 2 different dichlorotriazinyl azo dyes.

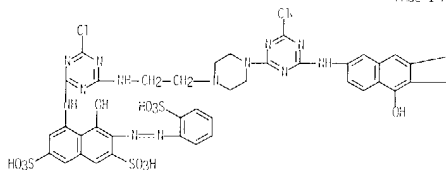
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RL: IIR (Industrial manufacture); TFM (Technical or engineered material use); PREP (Preparation); USCS (Uses)
(scarlet dye; production of piperazine-based disazo chlorotriazinyl reactive scarlet dyes)

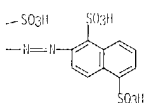
RH 475670 11 2 CAPLUS

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PAGE 1-A

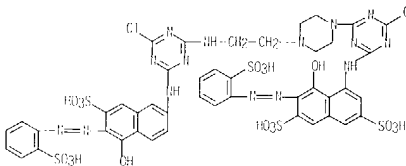


L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RH 475670-13-4 CAPLUS

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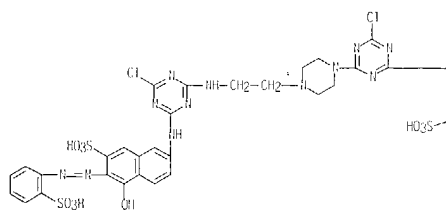


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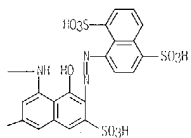
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L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

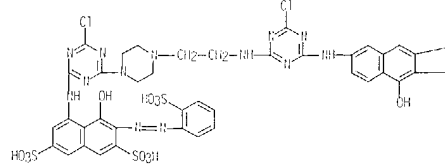


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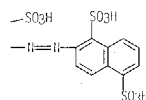
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L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



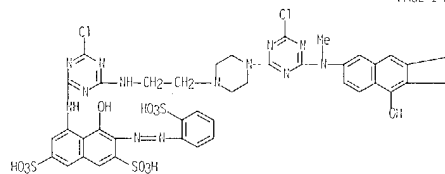
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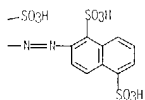
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PAGE 1-A



L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

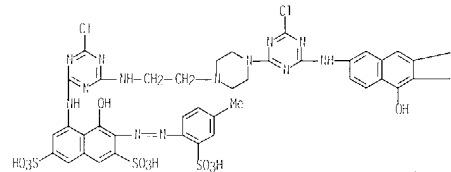
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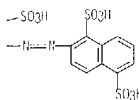
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PAGE 1-A



PAGE 1-B

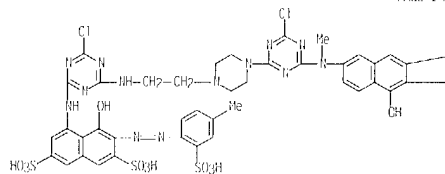


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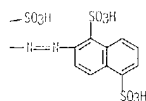
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L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

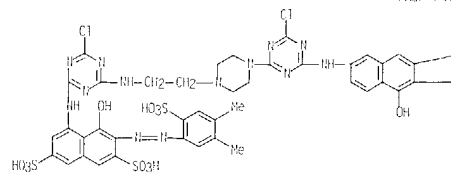


RN 475670-25-8 CAPLUS

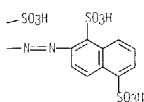
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L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on SIN (Continued)

PAGE 1-A



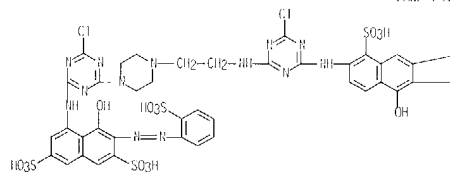
PAGE 1-B



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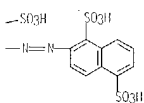
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PAGE 1-A



L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on SIN (Continued)

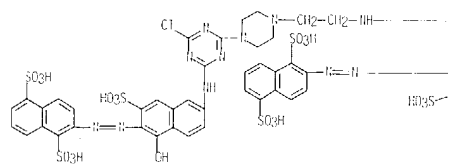
PAGE 1-B



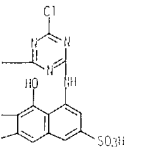
RN 475670-28-1 CAPLUS

CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[[4-chloro-6-[[7-[(1,5-disulfo-2-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

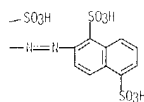


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L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on SIN (Continued)

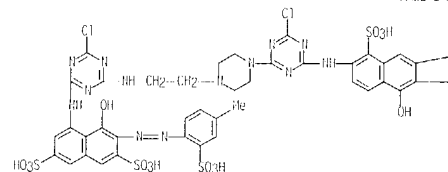
PAGE 1-B



RN 475670-27-0 CAPLUS

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PAGE 1-A

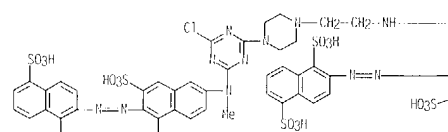


L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on SIN (Continued)

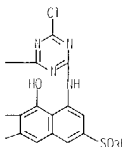
RN 475670-32-7 CAPLUS

CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[[4-chloro-6-[[7-[(1,5-disulfo-2-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

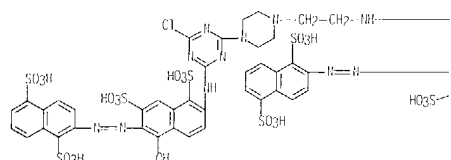


RN 475670-33-8 CAPLUS

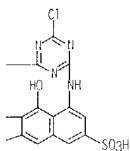
CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[[4-chloro-6-[[7-[(1,5-disulfo-2-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,5-disulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

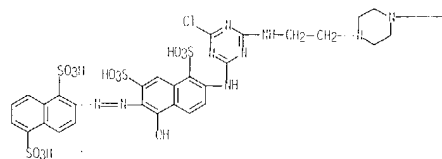


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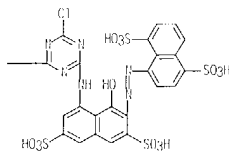
CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[4-[4-chloro-6-[[7-[(4,8-disulfo-1-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

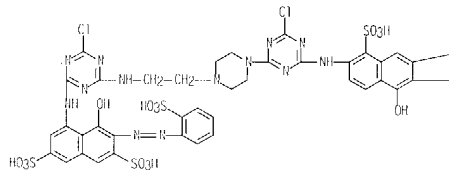


RN 475670-36-1 CAPLUS

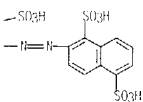
CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[4-[4-chloro-6-[[7-[(4,8-disulfo-1-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



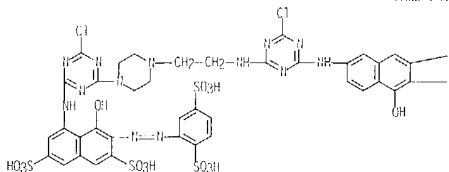
PAGE 1-B



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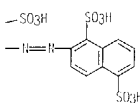
CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[4-[4-chloro-6-[[7-[(4,8-disulfo-1-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

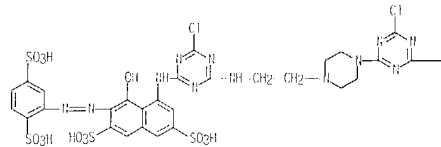
PAGE 1-B



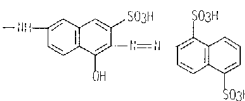
RN 475670-39-4 CAPLUS

CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[4-[4-chloro-6-[[7-[(4,8-disulfo-1-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

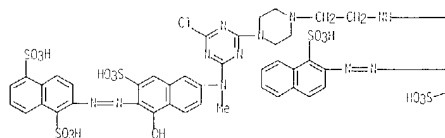


RN 475670-41-8 CAPLUS

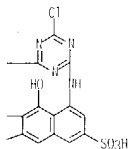
CH 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-chloro-6-[[2-[4-[4-chloro-6-[[7-[(4,8-disulfo-1-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L5 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:6713 CAPLUS

DN 136:85833

TI Preparation of N-(diaminotriazinyl)arylaldehyde hydrazones and analogs as antiviral agents

IN Aranes, Jaime E.; Cload, Sharon T.; Fleming, Elizabeth S.; Xiang, Yi Bin

PA Scriptgen Pharmaceuticals, Inc., USA

SO U.S., 114 pp.

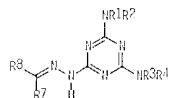
CODEL 06XXAM

DI Patent

LA English

FAH.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6336339	B1	2002/0101	US 1999-229703	1999/0113
PRAI US 1990-113656P	P	1990/0113		
OS MARPAT 136:85833				
GI				



AB Title comps. [e.g., I: R1-R8 = H, (un)substituted alk(en)yl, (hetero)aryl, etc.; R1R2, R3R4, R7R8 = atoms to complete a ring] were prepared. Preparation of select I (e.g., R1 = Cl2Ph, R2 = R4 = R7 = H, R3 = CMe3, R8 = C6H4F-2) was described. Data for biol. activity of I were given.

IT 232937-54-1P

RI: PAC (Pharmacological activity); SPM (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PRLP (Preparation); USES (Uses)

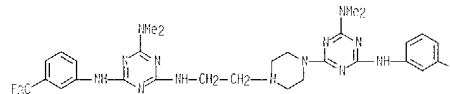
(preparation of N-(diaminotriazinyl)arylaldehyde hydrazones and analogs as antiviral agents)

RII 232937-54-1 CAPLUS

CH 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4-(dimethylamino)-6-[[3-(trifluoromethyl)phenyl]amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N-dimethyl-N'-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

L5 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

(CF3)

RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:937571 CAPLUS

DN 136:55381

TI Ink-jet inks, printing method and units therewith, their ink cartridges, ink sets and apparatus

IN Kanke, Takeshi; Nafune, Kuniko

PA Canon Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

CODEL JKKXAF

DI Patent

LA Japanese

FAH.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001351981	A2	2001/1225	JP 2000-176136	2000/0612
PRAI JP 2000 176136		2000/0612		
OS MARPAT 136:55381				
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *

AB Title aqueous inks, with good light and smudge resistance, contain I (R1 = (substituted) alkoxy, (substituted) aryl; R2, R4 = H, (substituted) alkyl; R3 = H, (substituted) alkyl, (substituted) alkoxy, (substituted) aryloxy, halogen; X1 = COOH (salt) or SO3H (salt); n = 1-2) and II (Ar1, Ar2 = (substituted) aryl with at least one of Ar1 and Ar2 substituted with CMe3 (salt) or SO3H (salt); L = divalent organic group; M = H, alkali metal, NH4, organic ammonium; R5 = triazine (derivative); R6, R7 = H, (substituted) alkyl, (substituted) alkenyl, (substituted) aralkyl, perhydroxyazine ring). An aqueous ink containing I (R1-R4 = H, X1 = p-COOH or salts, n = 1) and II (Ar1, Ar2 = o-CCMe3C6H4, L = III, M = H, R5 = IV, R6 = R7 = H) was used to print on various paper to form prints having good color tone, light resistance (100 h, fadeometer), and smudge prevention (after 1 wk at 30° and 80% relative humidity).

IT 382604-55-9D, free acid/salts with Li, Na, NH4 or quaternary

ammonium

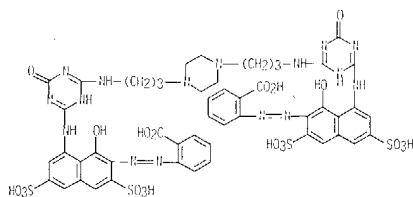
RI: TEH (Technical or engineered material use); USES (Uses)

(aqueous ink-jet inks containing disazo and benzoanthracene dyes for light and smudge resistance)

RII 382604-55-9 CAPLUS

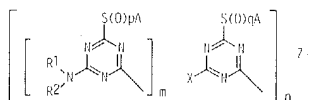
CH Benzoic acid, 2,2'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino(1,6 dihydro-6-oxo-1,3,5-triazine-4,2 diyl)imino(8-hydroxy-3,6 disulfo-1,7-naphthalenediylazo)]bis- (9CI) (CA INDEX NAME)

L5 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L5 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:746973 CAPLUS
 DN 135:3051/8
 TI Reactive dyes and their application
 IN Patsch, Manfred; Seybold, Guenther
 PA Dystar Textilfarben GmbH & Co. Deutschland KG, Germany
 SO Ger., Offen., 18 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN CIT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 1000887/1	A1	20011011	DE 2000 1000887/1	20000225
PRAI DE 2000-1000887/1				
OS HARPA1 135:3051/8				
GI				



AB Reactive dyes I (A = organic group; R1, R2 = H, organic group; X = chromophore, such as azo, with optional fiber-reactive groups; Z = imino-containing connective group; m = 0, 1; n = 1, 2, 3; p = 0, 1, 2; q = 0, 1, 2) are disclosed which are suitable for dyeing or printing of substrates containing OH groups or N atoms. I are especially suitable for application in combination with other dyes. Several examples of reactive dis- and trisazo dye production were given.

IT 366001-29-8P 366001-30-1P 366001-32-3P

366001-33-4P
 RL: IMF (Industrial manufacture); RCI (Reactant); ILM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

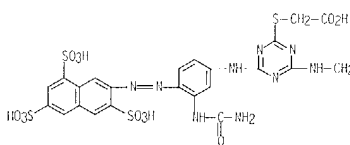
(dye; production of reactive dis- and trisazo dyes)

RN 366001-29-8 CAPLUS

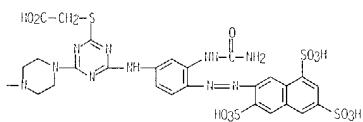
CN Acetic acid, [4-[4-[[3-[(aminocarbonyl)amino]-4-[(3,6,8-trisulfo-2-naphthalenyl)azo]phenyl]amino]-6-[4-[2-[[4-[[3-[(aminocarbonyl)amino]-4-[(3,6,8-trisulfo-2-naphthalenyl)azo]phenyl]amino]-6-[(carboxymethyl)thio]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]thio]-9CI) (CA INDEX NAME)

L5 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

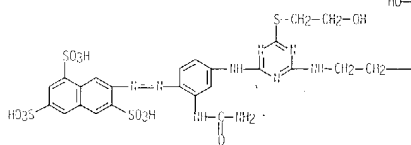


PAGE 1-B



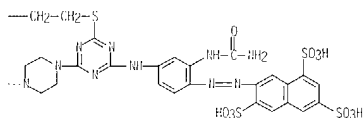
RN 366001-30-1 CAPLUS

CN 1,3,6-Naphthalenetrissulfonic acid, 7 [[2-[(aminocarbonyl)amino]-4-[[4-[4-[2-[[4-[[3-[(aminocarbonyl)amino]-4-[(3,6,8-trisulfo-2-naphthalenyl)azo]phenyl]amino]-6-[(2-hydroxyethyl)thio]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-[(2-hydroxyethyl)thio]-1,3,5-triazin-2-yl]amino]phenyl]azo] (9CI) (CA INDEX NAME)

PAGE 1-A
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L5 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

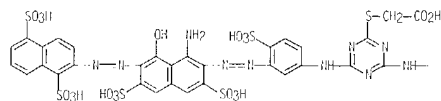
PAGE 1-B



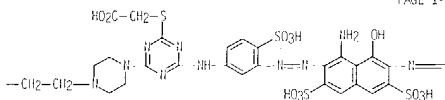
RN 366001-32-3 CAPLUS

CN Acetic acid, [[4-[[3-[[1-amino-7-[(1,5-disulfo-2-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfo]phenyl]amino]-6-[4-[2-[[4-[[3-[[1-amino-7-[(1,5-disulfo-2-naphthalenyl)azo]-8-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfo]phenyl]amino]-6-[(carboxymethyl)thio]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]thio] (9CI) (CA INDEX NAME)

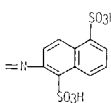
PAGE 1-A



PAGE 1-B



PAGE 1-C

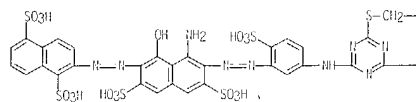


L5 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

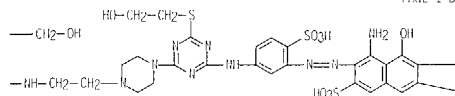
RN 366001-33-4 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[[[8-amino-7-[[[5-[[[4-[[[2-[[[4-[[[3-[[[1-amino-7-[[[1,5-disulfo-2-naphthalenyl]azo]-8-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfonyl]amino]-6-[(2-hydroxyethyl)thio]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-[(2-hydroxyethyl)thio]-1,3,5-triazin-2-yl]amino]-2-sulfonyl]azo]-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

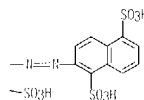
PAGE 1-A



PAGE 1-B



PAGE 1-C



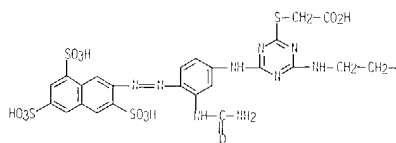
II 366001-29-8DP, oxidized 366001-30-1DP, oxidized
366001-32-3DP, oxidized 366001-33-4DP, oxidized
RL: IM: (Industrial manufacture); TM: (Technical or engineered material use); PREP: (Preparation); USES: (Uses)
(dye; production of reactive dis- and trisazo dyes)

L5 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

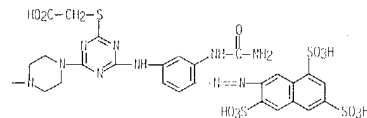
RN 366001-29-8 CAPLUS

CN Acetic acid, 1-[4-[[[3-[(aminocarbonyl)amino]-4-[(3,6,8-trisulfo-2-naphthalenyl)azo]phenyl]amino]-6-[(1,2-[[[4-[[[3-[(aminocarbonyl)amino]-4-[(3,6,8-trisulfo-2-naphthalenyl)azo]phenyl]amino]-6-[(carboxymethyl)thio]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]thio]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

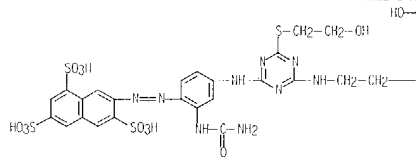


RN 366001-30-1 CAPLUS

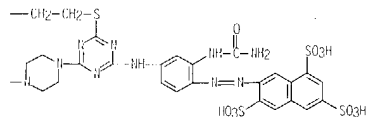
CN 1,3,6-Naphthalenetrisulfonic acid, 7-[[[2-[(aminocarbonyl)amino]-4-[[[4-[4-[[[2-[[[4-[[[3-[(aminocarbonyl)amino]-4-[(3,6,8-trisulfo-2-naphthalenyl)azo]phenyl]amino]-6-[(2-hydroxyethyl)thio]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-[(2-hydroxyethyl)thio]-1,3,5-triazin-2-yl]amino]phenyl]azo]- (9CI) (CA INDEX NAME)

L5 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



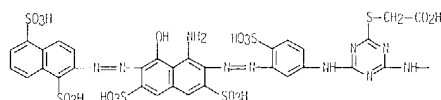
PAGE 1-B



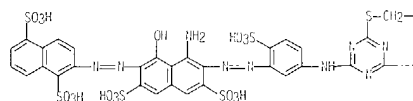
RN 366001-32-3 CAPLUS

CN Acetic acid, [[4-[[[3-[[[1-amino-7-[[[1,5-disulfo-2-naphthalenyl]azo]-8-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfonyl]amino]-6-[(1,2-[[[4-[[[3-[[[1-amino-7-[[[1,5-disulfo-2-naphthalenyl]azo]-8-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfonyl]amino]-6-[(carboxymethyl)thio]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]thio]- (9CI) (CA INDEX NAME)

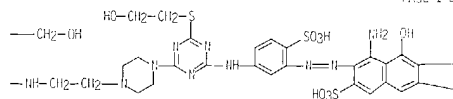
PAGE 1-A



PAGE 1-A



PAGE 1-B



L5 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM

AN 2000-117119 CAPLUS

DN 132:167667

TI Reactive tetrakisazo dyes, their preparation and use

IN Benzoe, Warren James; Hynett, Donna Maria

PA BASF A.-G., Germany

SO PCT Int. Appl., 29 pp.

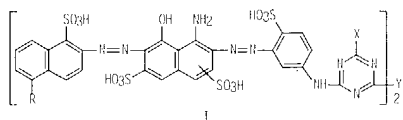
CODEM: PIXX02

DT Patent

LA English

FAN.CNT 1

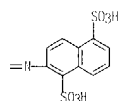
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 200003101	A1	20000217	WO 1999-GB2447	19990726
W: BR, CN, IN, JP, KR, TR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
BR 9912628	A	20010502	BR 1999-12628	19990726
EP 1100847	A1	20010523	EP 1999-934987	19990726
EP 1100847	B1	20030416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
TR 200100320	T2	20010621	TR 2001-200100320	19990726
JP 2002522587	I2	20020723	JP 2000-563731	19990726
AT 237661	E	20030515	AT 1999-934987	19990726
PT 1100847	T	20030731	PT 1999-934987	19990726
ES 2197633	T3	20040101	ES 1999-934987	19990726
US 6359121	B1	20020319	US 2001-744254	20010131
PRAI GB 1998-16780	A	19980731		
WO 1999-GB2447	W	19990726		
OS MARPAI 132:167667				
GI				



AB The dyes have the formula I [each R = H, SO₃H; each X = F, Cl, (un)substituted pyridinium; Y = NR₁NR₂ (with 1 exception), NR₃NR₄; R₁-R₃ =

L5 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

PAGE 1-C



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE.FORMAT

L5 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM (Continued)

C1-4 alkyl, C1-4 aminoalkyl, C1-1 hydroxyalkyl, or R1R2 completes a heterocycle; Z = (un)substituted C5-12 cycloalkylene or C5-12 (hetero)arylene, ≥ 2 such groups linked together, (un)substituted (un)interrupted (by H, O, S, or such a cyclic group) C1-15 alkylene or C2-15 alkenylene) or are salts of such I. Thus, H acid Na salt was coupled with diazotized 2,4-HM(AdH)CH₃SO₃H and the product was coupled with diazotized 2,1,5-HMCH₃SO₃H to give a disazo compd., which was deacetylated and condensed with cyanuric chloride, and the resulting dichlorotriazine deriv. was condensed 2:1 with EtNHCH₂CH₂NHMe to give a 1, 7max 616 nm, which dyed cotton in a fast greenish navy shade.

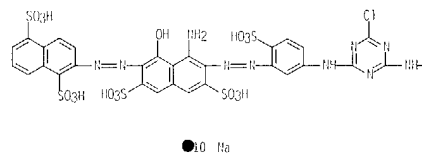
IT 250516-26-6P

RL: SPH (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USCS (Uses)
(preparation of reactive tetrakisazo dyes)

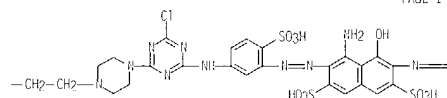
RII 250516-26-6 CAPLUS

CH 1,5-Naphthalenedisulfonic acid, 7-[[[8-amino-7-[[[5-[[[4-[4-[4-[[[3-[[[1-amino-7-[[[1,5-disulfo-2-naphthalenyl]azo]-8-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulphophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl] 6-chloro-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]azo]-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-, decasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L5 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2004 ACS on STM

AN 1999-464283 CAPLUS

UR 131:111412

TI Triazine antiviral compounds

IN Arenas, Jaime L.; Cload, Sharon L.; Fleming, Elizabeth S.; Xiang, Yi; Bin

PA Scriptgen Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 194 pp.

CODEM: PIXX02

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9936410	A1	19990722	WO 1999-US945	19990113
W: CA, GD, HR, ID, IN, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2318362	AA	19990722	CA 1999-2318362	19990113
EP 1053230	A1	20001122	EP 1999-902309	19990113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002509140	T2	20020326	JP 2000-540126	19990113
PRAI US 1998-6430	A	19980113		
WO 1999-US945	W	19990113		
OS MARPAI 131:111412				

AB Pharmaceutical formulations comprising 1,3,5-triazine derivs. are provided. The compds. and formulations of the invention exhibit a range of activities, including antiviral and antibiotic activities, and the formulations may be used, alone or in combination, as a method of treating a patient in need of antiviral and/or antibiotic therapy. The triazine derivs. bind to and inhibit functional nucleic acids, and hence, have broad applicability in the treatment of conditions associated with DNA and RNA viruses.

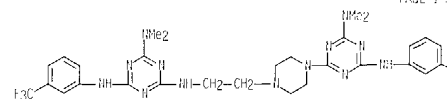
IT 232937-54-1

RL: BAC (Biological activity or effector, except adverse); USU (Biological study, unclassified); THU (Therapeutic use); BIDL (Biological study); USES (Uses)
(Triazine antiviral compds.)

RII 232937-54-1 CAPLUS

CH 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4-(dimethylamino)-6-[[[3-(trifluoromethyl)phenyl]amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-1,1,1-trimethyl-N''-[3-(trifluoromethyl)phenyl]- (SC1) (CA INDEX NAME)

PAGE 1-A



15 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

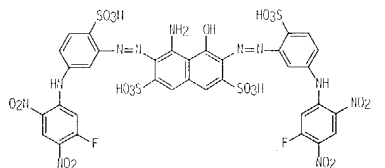
PAGE 1-B

CF3

RE:CH 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

15 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AM 1999:355837 CAPLUS
 DI 131:6663
 TI Preparation of reactive dyes containing a halobenzene nucleus
 IM Taylor, John Anthony; Rabjohns, Michael Alan
 PA BASF Aktiengesellschaft, Germany
 SO ICT Int. Appl., 121 pp.
 COGR: PIXXD2
 DT Patent
 LA English
 FAH CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9927019	A2	19990603	WO 1998-633406	19981112
WO 9927019	A3	19990715		
W: BR, CH, ID, JP, KR, IR, US				
RA: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1029002	A2	20000823	EP 1998-952935	19981112
EP 1029002	B1	20040512		
R: CH, DE, ES, GB, IT, LI, PT				
JP 2001524570	T2	20011204	JP 2000-522167	19981112
EP 1333062	A1	20030806	EP 2003 7521	19981112
R: CH, DE, ES, GB, IT, LI, PT				
CH 1121456	B	20030917	CH 1998-811133	19981112
TR 508365	B	20021101	TR 1998-87121801	19981229
US 6399751	B1	20020604	US 2000-554325	20000724
US 2003191293	A1	20031009	US 2002-117279	20020408
US 2003158395	A1	20030821	US 2002-158879	20020603
PRA1 GB 1997-23924	A	19971112		
EP 1998-952935	A3	19981112		
WO 1998-633406	W	19981112		
US 2000-554325	A3	20000724		
OS WARPAT 131:6563				
GI				



15 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

AB Reactive dyes having at least one halobenzene nucleus linked to a chromophoric group via an amino linkage and addnl. containing a second reactive group were prepared. E.g., fluorodinitrophenyl-substituted azo dye I was prepared. The reactive dyes were used to dye textiles and may be used to prepare inks.

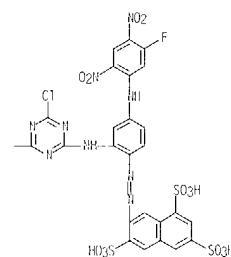
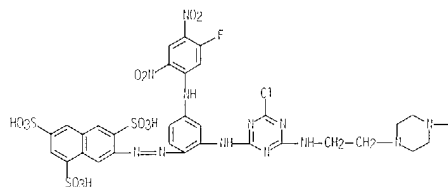
IT 225651-79-6P

RI: IMF (Industrial manufacture); SPN (Synthetic preparation); TEH (Technical or engineered material use); PRFP (Preparation); USES (Uses) (golden yellow dye; preparation of reactive dyes containing a halobenzene nucleus)

RI: 225651-79-6 CAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid, 7-[[[2-[[[4-chloro-6-[4-[7-[[[4-chloro-6-[[[5-(5-fluoro-2,4-dinitrophenyl)amino]-2-[[[3,6,8-trisulfo-2-naphthalenyl]azo]phenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-4-[[[5-fluoro-2,4-dinitrophenyl]amino]phenyl]azo]- (9C1) (CA INDEX NAME)

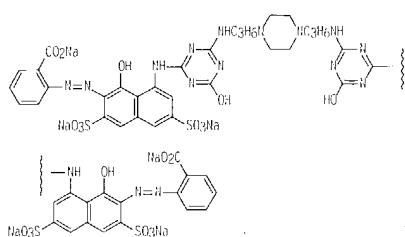
PAGE 1-A



L5 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1999-312692 CAPLUS
 DR 130:353796
 TI Preparation of ionic compounds by removing unnecessary ions by dialysis and ink-jet inks containing the ionic compounds
 IN Shimizu, Wataru
 PA Mitsubishi Chemical Industries Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN, CNT 1

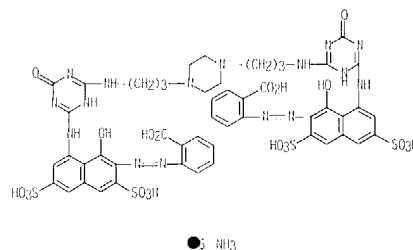
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11130699	A2	19990518	JP 1997-290668	19971023
PRAI JP 1997-290668		19971023		

GI



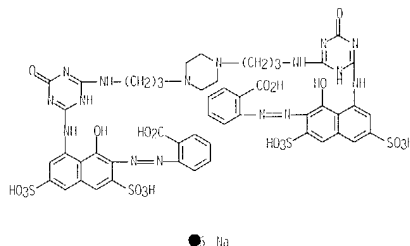
AB Ionic compds. having ionic water soluble groups, used as dyes, agrochemicals, drugs, detergents, food additives, etc., are prepared by adding counterions to aqueous solns. or aqueous suspensions of the ionic compds. and dialyzing the solns. or suspensions using a porous separating materials to remove unnecessary ions and exchange the counter ions. Also claimed are ink-jet inks containing dyes prepared as described above. A magenta dye 1 (prepared from H-acid, cyanur chloride, 1,4-bis(aminopropyl)piperazine, and 2-aminobenzoic acid) was dissolved in H₂O and the aqueous solution was dialyzed using a reverse-osmosis membrane at 40° while supplying H₂O for 2.5 h. After addition of H₂O and NH₄Cl the dialysis was continued for 1 h while

L5 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 supplying H₂O and further for 1 h without water supply. The above process was repeated 2 times to give an aq. soln. of 1, in which >99% of SO₃H and CO₂H are exchanged with NH₄⁺. An ink-jet ink contg. the dye soln., diethylene glycol, and iso-Pr alc. was also made.
 IT 225239-68-9P
 RL IMF (Industrial manufacture); SPH (Synthetic preparation); TFM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of ionic dyes and exchange of counterion by removing unnecessary ions by dialysis in the presence of wanted counterions, and ink-jet inks containing the dyes)
 RH 225239-68-9 CAPLUS
 CH Benzoic acid, 2,2'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino(1,6-dihydro-6-oxo-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, hexaammonium salt (9CI) (CA INDEX NAME)



IT 218261-61-9P
 RL PMU (Preparation, unclassified); RCT (Reactant); PKLP (Preparation); RACT (Reactant or reagent) (preparation of ionic dyes and exchange of counterion by removing unnecessary ions by dialysis in the presence of wanted counterions, and ink-jet inks containing the dyes)
 RH 218261-61-9 CAPLUS
 CH Benzoic acid, 2,2'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino(6-hydroxy-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, hexasodium salt (9CI) (CA INDEX NAME)

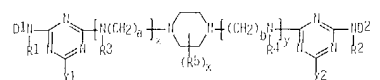
L5 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L5 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1999-36317 CAPLUS
 DR 130:151986
 TI Reactive dyes containing a piperazine residue, their preparation and use
 IN Elmezei, Warren James; Wynell, Donna Maria
 PA BASF A.-G., Germany
 SO PCT Int. Appl., 59 pp.
 CODEN: PIXX02
 DT Patent
 LA English
 FAN, CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9905224	A1	19990204	WO 1998-082162	19980720
W: BR, CH, ID, JP, KR, IR, US				
RK: AT, BE, CH, CY, DE, DK, ES, FI, FR, GR, GR, IT, IT, IL, MC, NL, PT, SE				
EP 990531	A1	20000510	EP 1998-035169	19980720
EP 990531	B1	20020306		
R: CH, DE, ES, GB, IT, LI, PT				
BR 9811035	A	20000801	BR 1998-11035	19980720
IR 200000227	I2	20000921	TR 2000-200000227	19980720
JP 2001510875	T2	20010807	JP 2000-504205	19980720
PI 990531	I	20020303	PT 1998-035169	19980720
ES 2173604	T3	20021016	FS 1998-035169	19980720
CH 1102947	B	20030312	CN 1998-007524	19980720
TW 568940	B	20040101	TW 1998-67112140	19980724
US 6248571	B1	20010619	US 2000-462500	20000124
PRAI GB 1997-15830	A	19970725		
WO 1998-082162	W	19980720		
OS MARPAT 130:154986				

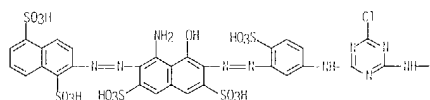
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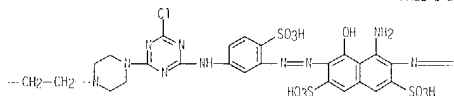
AB The dyes have the formula I (D1, D2 = azo chromophoric group; R1-R4 = H, (un)substituted alkyl; each R5 = alkyl; X1, X2 = labile atom or group; a, b = 1-5; x, y = 0, 1; (x + y) ≤ 1; z = 0-4). They can be prepared by reacting a piperazine derivative with resp. equimolar quantities of 2 triazine ring-containing reactive azo dyes or with 2 mol of a single reactive azo dye. For coloration of a substrate the dyes can be applied at pH > 7, for example, exhaust dyeing, padding, or printing. Thus, an aqueous solution of 0.021 mol/l [4-(dichlorotriazinylamino)-2-ureidophenyl]azo]-1,3,5-naphthalenetrisulfonic acid was added over 15 min to an aqueous solution of 0.01 mol/l (7-aminosthyl)piperazine at room temperature and kept overnight to give a

L5 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2004 ACS on STW (Continued)
 L with λ_{max} 426 nm.
 IT 220211-73-4P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (navy; reactive azo dyes containing a piperazine residue)
 RH 220211-73-4 CAPLUS
 CH 1,5-Naphthalenedisulfonic acid, 2-[[[4-amino-7-[[5-[[4-[4-[2-[[4-[4-[2-[[8-amino-7-[[1,5-disulfo-2-naphthalenyl]azo]-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfonyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-chloro-1,3,5-triazin-2-yl]amino]-2-sulfonyl]azo]-8-hydroxy-3,6-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

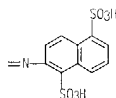
PAGE 1-A



PAGE 1-B

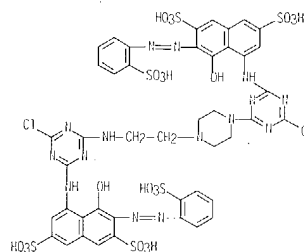


PAGE 1-C



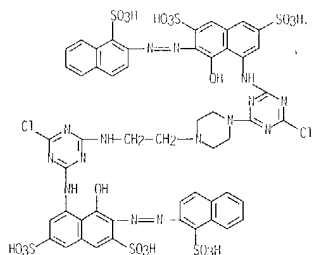
IT 220211-70-1P 220211-71-2P 220211-72-3P

L5 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2004 ACS on STW (Continued)
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (red; reactive azo dyes contg. a piperazine residue)
 RH 220211-70-1 CAPLUS
 CH 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[4-[2-[[4-chloro-6-[[8-hydroxy-3,6-disulfo-7-[[1-sulfo-2-naphthalenyl]azo]-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[[2-sulfonyl]azo]- (9C1) (CA INDEX NAME)

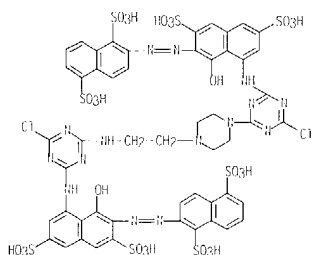


RH 220211-71-2 CAPLUS
 CH 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[4-[2-[[4-chloro-6-[[8-hydroxy-3,6-disulfo-7-[[1-sulfo-2-naphthalenyl]azo]-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[[1-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L5 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2004 ACS on STW (Continued)



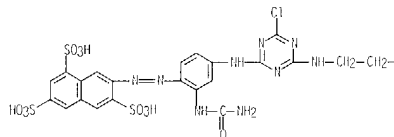
RH 220211-72-3 CAPLUS
 CH 1,5-Naphthalenedisulfonic acid, 2-[[[8-[[4-chloro-6-[4-[2-[[4-chloro-6-[[7-[[1,5-disulfo-2-naphthalenyl]azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



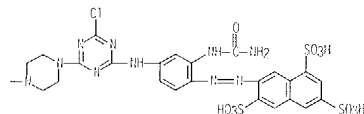
IT 220211-69-8P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (yellow; reactive azo dyes containing a piperazine residue)
 RH 220211-69-8 CAPLUS
 CH 1,3,6-Naphthalenetrisulfonic acid, 7-[[2-[[[aminocarbonyl]amino]-4-[[4-[4-[2-[[4-[[3-[[[aminocarbonyl]amino]-4-[[3,6,8-trisulfo-2-naphthalenyl]azo]phenyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]ethyl]-1-

L5 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2004 ACS on STW (Continued)
 piperazinyl]-6-chloro-1,3,5-triazin-2-yl]amino]phenyl]azo]- (9C1) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RE.CHT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE.FORMAT

L5 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1998:806502 CAPLUS
 DN 130:73879
 TI Printing method utilizing magenta ink
 IN Katsuragi, Takashi; Terada, Hisashi; Yamamoto, Mayumi
 PA Canon K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 21 pp.
 COFEN: JKKYAF

DT Patent
 LA Japanese
 FAN, CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10329418	A2	19981215	JP 1998-80747	19980327
PRA1	JP 1997-96364		19970401		

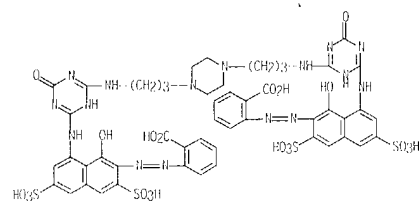
AB The printing method utilizes a specific anionic magenta ink for producing a magenta image which satisfies specified CIA Lab relations. The method is especially suitable for the ink-jet printing. The printed image shows excellent water-resistance and bright magenta color.

IT 218281-61-9

RL: TM (Technical or engineered material use): USES (Uses)
 (in magenta ink-jet printing ink)

RN 218281-61-9 CAPLUS

CH Benzoic acid, 2,2'-[1,4-piperazinediyl]bis[3,1-propanediylimino(6-hydroxy-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediylazo)]bis-, hexasodium salt (9CI) (CA INDEX NAME)



Na

L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1998:697319 CAPLUS
 DN 129:277343
 TI Bis[2-[(indanylazo)sulfonaphthylamino]triazin-1-yl]amino substituted derivatives, free of fiber-reactive groups, as colorants for ink-jet inks
 IN Tallant, Neil Antony; Gregory, Peter; Night, Paul
 PA Zeneca Limited, UK
 SO Brit. UK Pat., Appl., 34 pp.
 COFEN: BAKXDH

DT Patent
 LA English
 FAN, CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2317184	A1	19980318	GB 1997 18343	19970901
GA	2317184	B2	20000816		
PRA1	GB 1996-18976	A	19960911		
GB	1996-18994	A	19960911		

OS MARPAT 129:277343

AB Disazo dyes containing 2 sulfoindan, triazinyltriamino, and 3-sulfo-4-naphthol groups are disclosed. The dyes have good wet and light fastness when employed in aqueous jet-printing inks. Thus, 5-aminoindan-6-sulfonic acid was diazotized and coupled with the 1:1 product of cyanuric chloride and 1-amino-8-naphthol-3,6-disulfonic acid and the resulting dichlorotriazinyl azo dye was condensed twice with 1,4-bis(3-aminopropyl)piperazine to give a disazo dye which was incorporated into a jet-printing ink base.

IT 213972-61-3P 213972-62-4P 213972-63-5P

213972-65-7P 213972-66-8P 213972-71-5P

RL: INF (Industrial manufacture); TM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (dye; preparation of disazo dyes for aqueous jet-printing inks)

RN 213972-61-3 CAPLUS

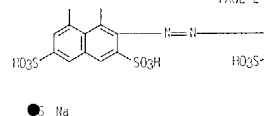
CH 2,7-Naphthalenedisulfonic acid, 4,4'-[1,4-piperazinediyl]bis[3,1-propanediylimino(6-[(3-aminopropyl)-1-piperazinyl]propyl)amino]-1,3,5-triazine-4,2-diyl]imino]]bis[6-[(2,3-dihydro-6-sulfo-1H-inden-5-yl)azo]-5-hydroxy-, hexasodium salt (9CI) (CA INDEX NAME)

L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



Na

PAGE 2-B

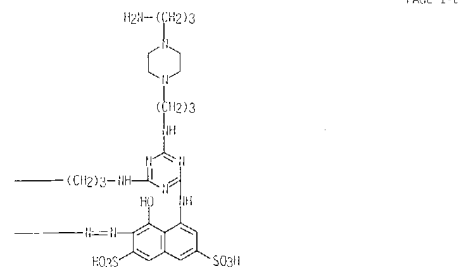


RN 213972-62-4 CAPLUS

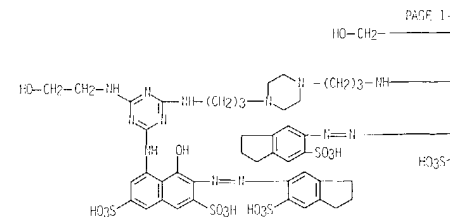
CH 2,7-Naphthalenedisulfonic acid, 4,4'-[1,4-piperazinediyl]bis[3,1-propanediylimino(6-[(2-hydroxyethyl)amino]-1,3,5-triazine-4,2-diyl)imino]]bis[6-[(2,3-dihydro-6-sulfo-1H-inden-5-yl)azo]-5-hydroxy-, hexasodium salt (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-A

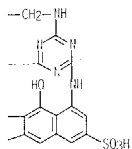


Na



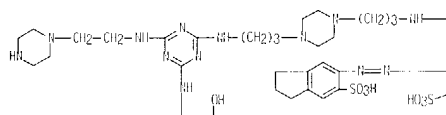
L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



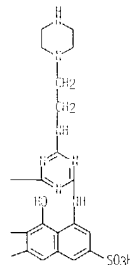
RN 213972-63-5 CAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4,4'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino[6-[[[2-(1-piperazinyl)ethyl]amino]-1,3,5-triazine-4,2-diyl]imino]]bis[6-[(2,3-dihydro-6-sulfo-1H-inden-5-yl)azo]-5-hydroxy-], hexasodium salt (9C1) (CA INDEX NAME)

PAGE 1-A

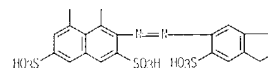


L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



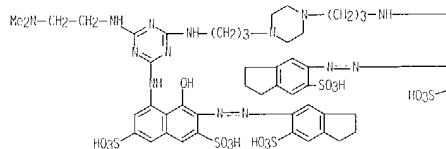
PAGE 2-A



● Na

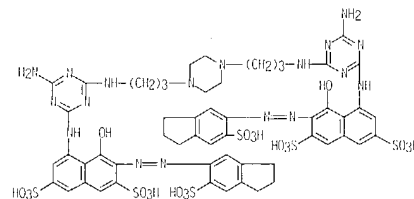
RN 213972-65-7 CAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4,4'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino[6-[[[2-(dimethylamino)ethyl]amino]-1,3,5-triazine-4,2-diyl]imino]]bis[6-[(2,3-dihydro-6-sulfo-1H-inden-5-yl)azo]-5-hydroxy-], hexasodium salt (9C1) (CA INDEX NAME)

L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A
Me₂N-CH₂

● Na

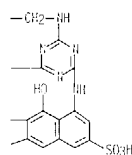
L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



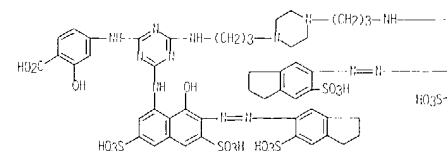
● Na

RN 213972-71-5 CAPLUS
 CN Benzoic acid, 4,4'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino[6-[[[2-(2,3-dihydro-6-sulfo-1H-inden-5-yl)azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]imino]]bis[2-hydroxy-], hexasodium salt (9C1) (CA INDEX NAME)

PAGE 1-A

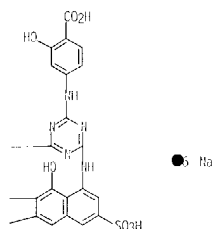


RN 213972-66-8 CAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4,4'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino[6-amino-1,3,5-triazine-4,2-diyl]imino]]bis[6-[(2,3-dihydro-6-sulfo-1H-inden-5-yl)azo]-5-hydroxy-], hexasodium salt (9C1) (CA INDEX NAME)



L5 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



L5 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:674915 CAPLUS

DN 130:4974

TI Ink-jet printing inks with good color production on plain paper

IN Sano, Hideo; Yamada, Masahiro; Wisthaara, Toru

PA Mitsubishi Chemical Industries Ltd., Japan

SD Jpn. Kokai Tokkyo Koho, 12 pp.

CODE: JEXXAF

DI Patent

LA Japanese

FAN, CRI 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10279858	A2	19981020	JP 1997 83/28	19970407
PRAI	JP 1997 83/28		19970402		

OS MARPAT 130:4974

AB

Ink-jet printing inks with good color production on plain paper are prepared in aqueous medium and contain p-(4H-1H)C6H2R1R2R3R4(1H:R4?)-p [A1 2 = (optionally SO3H-substituted) Ph, naphthyl groups; R1-4 = H, (optionally substituted) C1-4 alk(ox)yl, NHCO2R5 (R5 = RH2, C1-4 alkyl group), halogen, CN group; Z1,2 = (optionally amine- or ether group-containing) triazinediyl groups; Y1 = H(CN2)aX(CH2)b(CH)c (X = 1,4-piperazinediyl group), 1,4-piperazinediyl or specified amino linking groups; a, b = 0-6; c = 0, 1] and m-(B1H:1)C6H2R6R7R8H(Z3Y2)n2H4C6H2R8R9(N:R8?)-m [B1,2 = (optionally substituted) 6-hydroxy-2-pyridon-5-yl or 5-hydroxy-1-phenyl-pyrazol-4-yl groups; R6-9 = H, SO3H, COOH; Z3,4 = (optionally amine- or ether group-containing) triazinediyl groups; Y2 = Y1; n = 0, 1] as colorants.

IT 215871-61-7

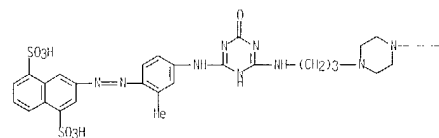
RL: PRP (Properties): TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing inks with good color production on plain paper)

RI 215871-61-7 CAPLUS

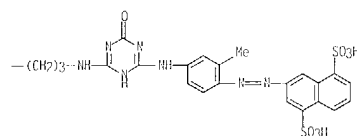
CI 1,5-Naphthalenedisulfonic acid, 3,3'-[1,4-piperazinediylbis[3,1-propanediylimino(1,6-dihydro-6-oxo-1,3,5-triazine-4,2-diyl)imino(2-methyl-4,1-phenylene)azo]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



L5 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:731459 CAPLUS

DN 128:68511

TI Color image formation by ink-jet printing

IN Sano, Hideo; Takimoto, Hiroshi

PA Mitsubishi Chemical Industries Ltd., Japan

SD Jpn. Kokai Tokkyo Koho, 19 pp.

CODE: JEXXAF

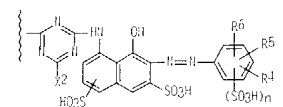
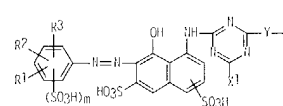
DI Patent

LA Japanese

FAN, CRI 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09286167	A2	19971104	JP 1996 338200	19961218
PRAI	JP 1996 34/95		19960222		

GI



AB In forming a color image by jetting aqueous magenta, yellow and cyan inks, the magenta ink contains ≥ 1 free acid type dye I (R1-6 = C1-9 alkyl, C1-9 alkoxy, halo, H, hydroxy, carbamoyl, sulfonyl, amino, nitro, sulfonic acid ester, C1-9 alkylsulfonyl, carboxyl, carboxylic acid ester; m,n = 0-2; X1, X2 = OR/ (R/ = H, C1-8 alkyl, C2-3 alkenyl, aryl, aralkyl, cyclohexyl, H-containing heterocyclyl); Y = specified N-containing divalent group), and other color inks each contains a specified dye. The image formed by the invention method shows superior resistance to the environment changes, light, and water, and has sharp tone and good image d.

IT 179868-96-3

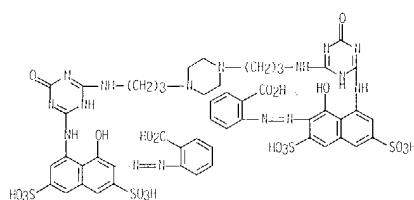
RL: TEM (Technical or engineered material use); USES (Uses)

(contained in magenta ink for color image formation)

RI 179868-96-3 CAPLUS

CI Benzoic acid, 2,2'-[1,4-piperazinediylbis[3,1-propanediylimino(1,6-dihydro-

L5 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
6-oxo-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, tetrasodium salt (9C1) (CA INDEX NAME)



● 11a

L5 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AI 1991:639373 CAPLUS

CI 127:235674

TI Disazo dyes based on two linked 2-(7-(carboxyphenylazo)-8-hydroxy-3,6-disulfonaphthylamino)-4-substituted triazine-6-yl units and their use in inks

III Gregory, Peter; Kenyon, Ronald Wynford; Wight, Paul

PA Zeneca Limited, UK

SO Brit. UK Pat. Appl., 16 pp.

CODEN: BAXXDU

DT Patent

LA English

FAH. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2308377	A1	1997/0625	GB 1996-24698	1996/1127
PRAI GB 1995-25858		1995/1219		
CS WARPAT 127:235674				

AB The disazo compds. A1N:R1R2(R1)R2(R2)X3H:NA2 (A1, A2 = optionally substituted carboxyphenyl; J = 8-hydroxy-3,6-disulfonaphthalene connected by 7- and 1-amino linkages; L = organic linking group; R1, R2 = H, optionally substituted hydrocarbyl; R1R2 together with L may form a 5- or 6-membered ring with N; X = 2,4-triazinediyl containing O, N, or S substituent) and their salts are suitable dyes for aqueous jet-printing inks for paper, textile, or projection slide substrates. Thus, the dichlorotriazinyl compound obtained by coupling diazotized 5-aminoisophthalic acid with dichlorotriazinyl H acid was condensed (2:1) with 1,4-bis(3-aminopropyl)piperazine (I) and the resulting bis(monochlorotriazinylazo) product was heated (1:2) with more I to provide a disazo dye which could be incorporated into an aqueous jet-printing ink and applied on plain paper, giving bright magenta shades having good water and light fastness.

IT 195245-46-6P

RI: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACI (Reactant or reagent)

(intermediate: preparation of disazo dyes for aqueous jet-printing inks)

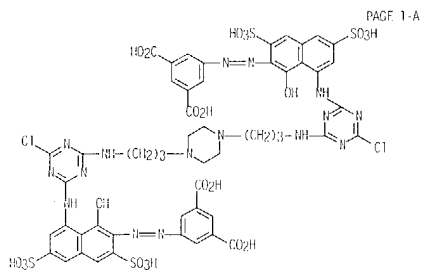
RN 195245-46-6 CAPLUS

CI 1,3-Benzenedicarboxylic acid, 5,5'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino(6-chloro-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, octaammonium salt (9C1) (CA INDEX NAME)

L5 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L5 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1 A



PAGE 2 A

● 11b

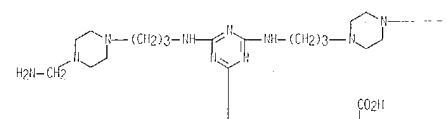
IT 195245-46-6P

RI: IMF (Industrial manufacture); TFM (Technical or engineered material use); PREP (Preparation); USCS (Uses)

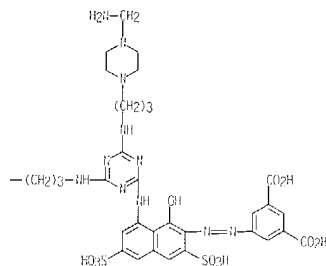
(magenta dye: preparation of disazo dyes for aqueous jet-printing inks)

RN 195245-46-6 CAPLUS

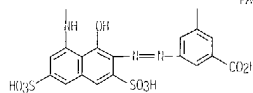
CI 1,3-Benzenedicarboxylic acid, 5,5'-[1,4-piperazinediyl]bis[3,1-propanediyl]imino(6-chloro-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, octaammonium salt (9C1) (CA INDEX NAME)



PAGE 1-B



PAGE 2-A



L5 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L5 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AI 1997:636822 CAPLUS
 DI 127:235673
 TI Disazo dyes and their use in inks based on two linked 2-[7-(2-sulphophenylazo)-8-hydroxy-3,6-disulphonaphthylamino]-4-substituted-triazine-6-yl units
 IN Kenyon, Ronald Kynford; Gregory, Peter; Wight, Paul
 PA Zeneca Limited, UK
 SO Brit. UK Pat. Appl. 17 pp.
 CODEN: JAXXDU
 DT Patent
 LA English
 FAH CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2308379	A1	19970625	GB 1996-24690	19961127
	GB 2308379	B2	20000329		
	US 5773593	A	19980630	US 1996-769701	19961218
	JP 09217016	A2	19970819	JP 1996-339537	19961219
PRAI	GB 1995 25882	A	19951219		
OS	MARPAT 127:235673				

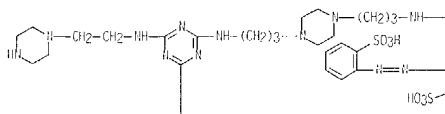
AB The dyes AIN:R1X(R1)LN(R2)XJN:RA2 (A1, A2 = optionally substituted 2-sulphophenyl; J = 8-hydroxy-3,6-disulphonaphthalene connected by 7- and 1-amino linkages; L = piperazinediyl-containing linking group; R1, R2 = H, optionally substituted hydrocarbyl; R1R2 together with L may form a 5- or 6 membered ring with N; X = 2,4-triazinediyl containing 0, R, or S substituent) or their salts are suitable for aqueous jet-printing inks for paper, textile, or projection slide substrates. Thus, orthanilic acid-H acid was prepared and condensed with cyanuric acid to give a dichlorotriazinyl compound to which was added 1,4-bis(3-aminopropyl)piperazine. The resulting bis(monochlorotriazinylazo) product was condensed with 1-(2-aminocetyl)piperazine to provide a disazo dye which could be incorporated into an aqueous jet-printing ink and applied on plain paper, giving bright magenta shades having good water and light fastness.

IT 195379-30-7P
 RL: IMF (Industrial manufacture); TDM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (preparation of disazo dyes for aqueous jet-printing inks)

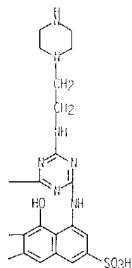
RN 195379-30-7 CAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4,4'-[1,4-piperazinediylbis[3,1-propanediylimino[6-[[2-(1-piperazinyl)ethyl]amino]-1,3,5-triazine-4,2-diyl]imino]]bis[5-hydroxy-6-[(2-sulphophenyl)azo]- (9CI) (CA INDEX NAME)

L5 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

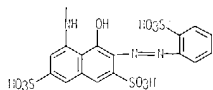
PAGE 1-A



PAGE 1-B



PAGE 2-A



L5 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L5 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

A1 1996-494110 CAPLUS

DN 125-145333

I1 Jet-printing inks containing triazine group-containing disazo acid dyes

I1 Takimoto, Hiroshi, Sano, Hideto, Yanada, Masahiro

PA Mitsubishi Chemical Corporation, Japan

SO Eur. Pat. Appl., 23 pp.

CONF: EPX204

DT Patent

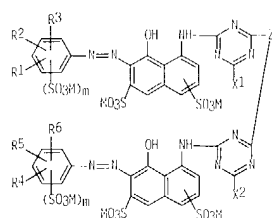
LA English

FAH CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
P1	EP 717089	A1	19960619	EP 1995-119552	19951212
	EP 717089	B1	19990324		
	R: DE, GB				
	JP 08311375	A2	19961126	JP 1995-120060	19950519
	JP 3396998	B2	20030414		
	JP 08218021	A2	19960827	JP 1995-320290	19951208
	JP 3384718	B2	20030310		
	US 5609673	A	19970311	US 1995-571179	19951212
PRA1	JP 1994-307708	A	19941212		
	JP 1995-120060	A	19950518		

OS MARPAT 125-145333

GI



AB Storage-stable magenta jet-printing inks that provide images with high d. and good light and water resistance and color tone contain dyes I [R1-6 (substituted) C1-9 alkyl, C1-9 alkoxy, halo, H, OH, (substituted) carbamoyl, (substituted) sulfonyl, (substituted) amino, NO2, sulfonic ester group, CO2H, or carboxylate ester; X1, X2 = OR7, R7 = H.

L5 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

(substituted) C1-8 alkyl, (substituted) C2-3 alkenyl, (substituted) aralkyl, (substituted) cyclohexyl, or (substituted) nitrogenous heterocyclic group, 7 = nitrogenous heterocyclic group-contg. divalent group, M = cation].

IT 179868-96-3 179868-98-5 179869-01-3

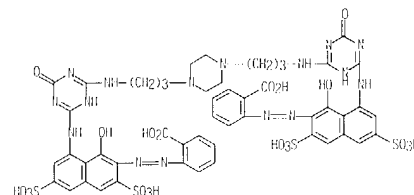
RL: PRP (Properties): TEH (Technical or engineered material use): USES

(Uses)

(jet-printing inks containing triazine group-containing disazo acid dyes)

RI 179868-96-3 CAPLUS

CN Benzoic acid, 2,2'-[1,4-piperazinediylbis[3,1-propanediylimino(1,6-dihydro-6-oxo-1,3,5-triazine-1,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, tetrasodium salt (9CI) (CA INDEX NAME)



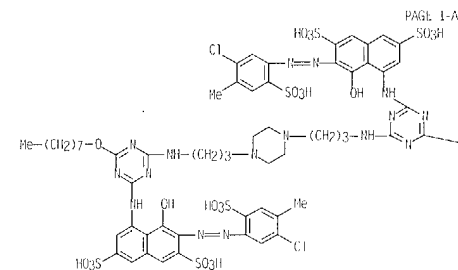
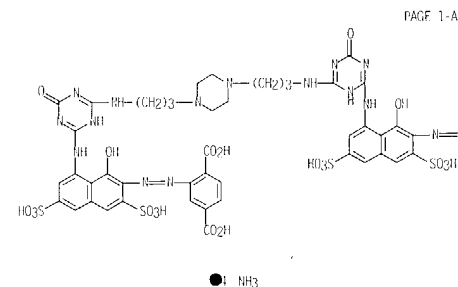
●: Na

RN 179868-98-5 CAPLUS

CN 1,4-Benzenedicarboxylic acid, 2,2'-[1,4-piperazinediylbis[3,1-propanediylimino(6-hydroxy-1,3,5-triazine-4,2-diyl)imino(8-hydroxy-3,6-disulfo-1,7-naphthalenediyl)azo]]bis-, tetraammonium salt (9CI) (CA INDEX NAME)

L5 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L5 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CN ?

CRN 74-89-5

CNT C H5 H

HgC -NH2

RN 179869-01-3 CAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4,4'-[1,1-piperazinediylbis[3,1-propanediylimino(6-(octyloxy)-1,3,5-triazine-4,2-diyl)imino]]bis[6-[(5-chloro-4-methyl-2-sulphophenyl)azo]-5-hydroxy-, compd. with ethanamine (1:6) (9CI) (CA INDEX NAME)

CN 1

CRN 179869-00-2

CNT C66 H92 Cl2 N16 O22 S6

L5 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:171898 CAPLUS

DN 124:204938

T1 Anionic acid azo direct dyes, their preparation, their mixtures, and their use

IN Lauk, Urs

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 71 pp.

COEN: EPXX04

DT Patent

LA German

FAM:CHT 1

PATCH NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 693538	A2	19960124	EP 1995-810387	19950612
EP 693538	A3	19960605		
EP 693538	B1	20010822		
R: BE, CH, DE, ES, FR, GB, GR, IT, LI, PT				
HS 5631352	A	19970520	HS 1995 460174	19950602
ES 2161847	T3	20011216	CS 1995-810387	19950612
PI 693538	T	20020130	PT 1995 810387	19950612
JP 08003169	A2	19960109	JP 1995-146285	19950613
CN 1133323	A	19961016	CN 1995 107353	19950619
CN 1066178	B	20010523		
BR 9502861	A	19960604	BR 1995 2861	19950620
GR 3036651	T3	20011231	GR 2001-401509	20010918
PRAI CH 1994-1952	A	19940620		

OS MARPAT 124:201938

AB Mixts. of ≥ 1 azo dye containing 1 or 2 aminotriazine groups with ≥ 1 azo dye containing 2 aminotriazine groups are direct dyes for cellulosics. They are high-temperature-stable and are especially suited for 1-bath dyeing of polyester/cotton with incorporation of a polyester disperse dye under polyester dyeing conditions. Thus, 1 mol cyanuric chloride was condensed with 2 mol 7-amino-4-hydroxy-3-(4-methoxy-2-sulphophenylazo)-2-naphthalenesulfonic acid and then with 1 mol 1,3-diaminopropane to provide an aminotriazine disazo dye which dyed cotton in fast red shades. The dye could also be combined with another azo dye for application.

IT 174571-94-9

RL: TEM (Technical or engineered material use); USES (Uses)
(anionic acid azo direct dye mixts. for dyeing of cellulosics)

RN 174571-94-9 CAPLUS

CH 2,7-Naphthalenedisulfonic acid, 4-[[4-[[4-[[2-aminoethyl]amino] 1-piperazinyl]-6-[[5-hydroxy-7-sulfo-6-[[2-sulfo-1-[[4-(4-sulphophenyl)azo]phenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]-5-methoxy-2-methylphenyl]azo]-5-hydroxy-, mixt. with 5-hydroxy-4-[[4-[[4-[[2-[[4-[[4-(8-hydroxy-3,6-disulfo-1-naphthalenyl)azo]-2-methoxy-5-methylphenyl]amino]-6-[[5-hydroxy-7-sulfo-6-[[2-sulfo-4-[[4-(4-sulphophenyl)azo]phenyl]azo]-2-naphthalenyl]amino]-1,3,5-

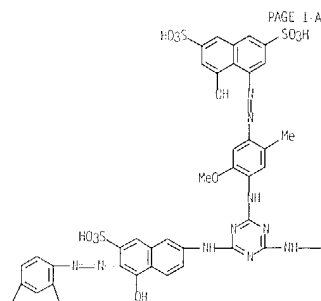
L5 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-[[5-hydroxy-7-sulfo-6-[[2-sulfo-4-[[4-(4-sulphophenyl)azo]phenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]-5-methoxy-2-methylphenyl]azo]-2,7-naphthalenedisulfonic acid (9CI) (CA INDEX NAME)

CH 1

CRN 174571-93-8

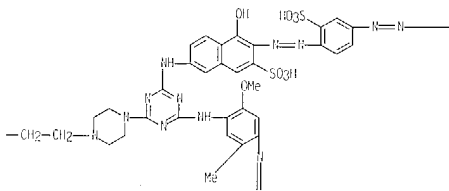
CMF C92 H77 N25 O36 S10



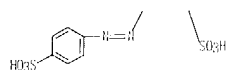
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I5 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



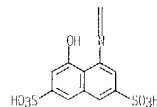
PAGE 1-C



PAGE 2-A

L5 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

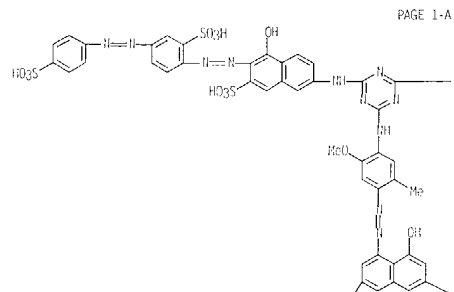
PAGE 2-B



CH 2

CRN 174571-92-7

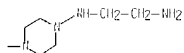
CMF C49 H47 N15 O18 S5



PAGE 1-A

L5 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



L5 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:785207 CAPLUS

DN 123:313739

TI Water based recording liquids containing bistriazine-containing tetraazo dyes

IN Sano, Hideo; Sato, Nobuyoshi; Murata, Jukichi

PA Mitsubishi Kagaku KK, Japan; Mitsubishi Chemical Corp.

SD Jpn. Kokai Tokkyo Koho, 15 pp.

CIDEH: JKKXXAF

DT Patent

LA Japanese

FAN: CNT 1

	PATEH NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07150098	A2	19950613	JP 1993-301926	19931701
	JP 3511652	B2	20040329		
PRAI	JP 1993-301926		19931201		
OS	HARPAT 123:313739				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB title liqs., useful for ink-jet printer, etc., contain water-based mediums and all dyes selected from tetraazo compds. I as free acids [A, D (substituted) Ph, naphthyl; R, C = (substituted) phenylene, naphthylene; R1-4 = H, (substituted) C1-10 alkyl, (substituted) C1-18 alkenyl, (substituted) aryl, (substituted) aralkyl, (substituted) cycloalkyl, (substituted) heterocycle; Y = divalent linking group; m, n = 0, 1]. Thus, diethylene glycol 10, iso-Pr alc, 3, tetrazo dye II 3, and balance water were mixed to give title liquid providing clear bluish black dots in ink-jet printing.

IT 170694-21-0

RI: TFH (Technical or engineered material use); USES (Uses)

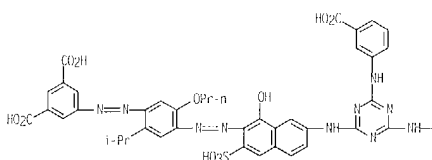
(dyes; inks containing water-based mediums and bistriazine containing tetraazo dyes)

RN 170694-21-0 CAPLUS

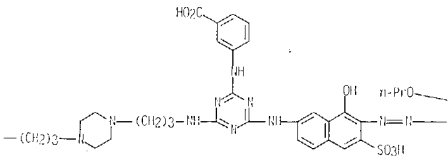
CH 1,3-Benzenedicarboxylic acid, 5,5'-[1,4-piperazinediylbis[3,1-propenediylimino(6-[3-carboxyphenylamino]-1,3,5-triazine-4,2-diyl)]amino(1-hydroxy-3-sulfo-7,2-naphthalenediylazo[2-(1-methylethyl)-5-propoxy-4,1-phenyleneazo]]bis- (9CI) (CA INDEX NAME)

L5 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

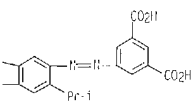
PAGE 1-A



PAGE 1-B



PAGE 1-C



L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:526613 CAPLUS

DN 122:290896

TI Piperidine-triazine compounds as antioxidants

IN Borzatta, Valerio; Vignali, Graziano; Guizzardi, Fabrizio

PA Ciba Geigy A. G., Switz.

SD Ger. Offen., 46 pp.

CIDEH: GWXXBX

DT Patent

LA German

FAN: CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4411559	A1	19941006	DE 1994-4411559	19940102
	US 5489683	A	19960706	US 1994-219049	19940328
	GB 2276878	A1	19941012	GB 1994-6236	19940329
	GB 2276878	B2	19970312		
	ES 2097081	A1	19970316	ES 1994-692	19940330
	ES 2097081	B1	19971201		
	CA 2120372	AA	19941006	CA 1994-2120372	19940331
	FR 2703684	A1	19941014	FR 1994-3809	19940331
	FR 2703684	B1	19950804		
	NL 9400515	A	19941101	NL 1994-515	19940331
	BL 1006991	A4	19950214	BE 1994-340	19940331
	JP 06340660	A2	19941213	JP 1994-90570	19940405
	US 5696261	A	19971209	US 1995-555353	19951108
PRAI	IT 1993-M1661	A	19930105		
	US 1994-219049	A3	19940328		
OS	HARPAT 122:290896				

AB Piperidine- and triazine-containing oligomeric compds. were disclosed as antioxidants (light stabilizers) for polymeric materials such as polyolefins (polyethylenes, polypropylenes).

IT 162782-56-1P 162782-57-2P 162782-58-3P

162782-61-8P

RI: MDA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); RCT (Reactant); SPH (Synthetic preparation); TEN (Technical or engineered material use); PRFP (Preparation); RACT (Reactant or reagent); USES (Uses)

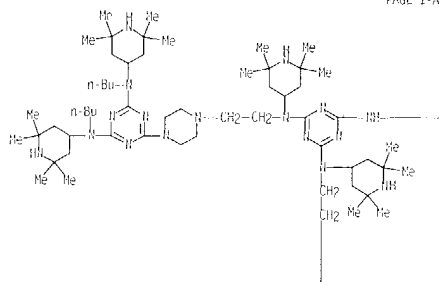
(preparation of piperidine- and triazine-containing oligomeric compds. antioxidants)

RN 162782-56-1 CAPLUS

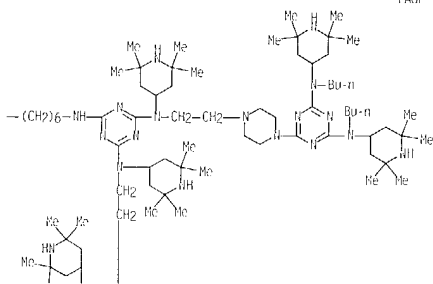
CH 1,3,5-triazine-2,4,6-triamine, N,N'''-[1,6-hexanedibis[N,N'''-bis[2-[4-[4,6-bis(butyl(2,2,6,6-tetraethyl-4-piperidyl)amino]-1,3,5-triazin-2-yl)-1-piperazinyl]ethyl] N,N'''-bis(2,2,6,6-tetramethyl-4-piperidyl)]- (9CI) (CA INDEX NAME)

L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

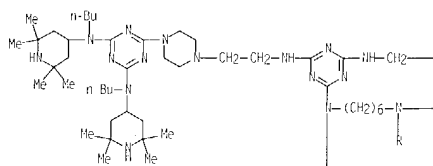


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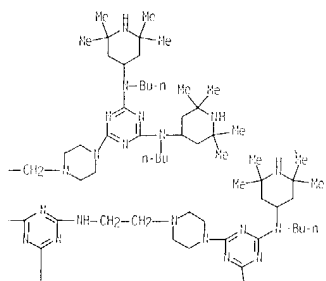


L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

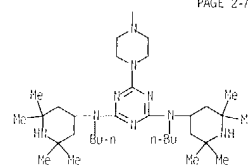


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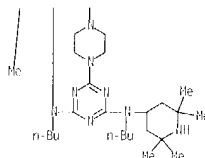


L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



PAGE 2-B

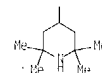


RN 162782-57-2 CAPLUS

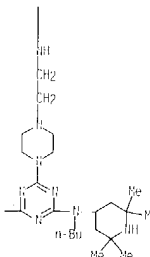
CH 1,3,5-triazine-2,4,6-triamine, N,N''',1,6-hexanediylbis[2',N'' bis[2-[4-[1,6-bis(butyl)(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



PAGE 2-B

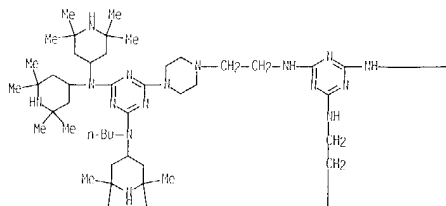


PAGE 3-A



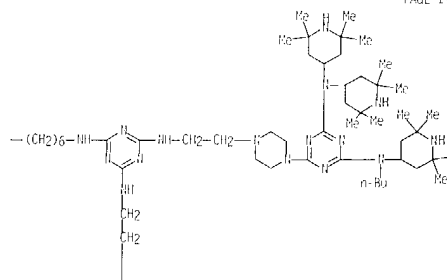
L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 RN 162782-59-3 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N,N''',1,6-hexanediylbis[N',N''-bis[2-[4-[bis(2,2,6,6-tetramethyl-4-piperidinyl)amino]-6-[butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]]-1-piperazinyl]ethyl]- (9C1) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

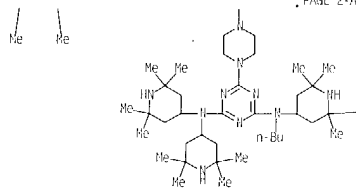


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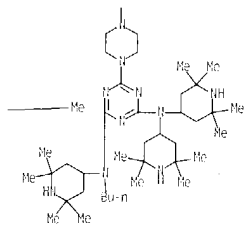
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L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A

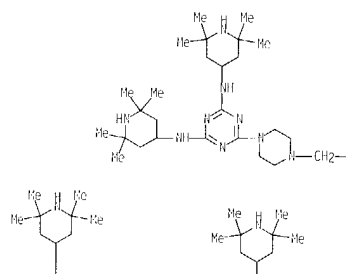


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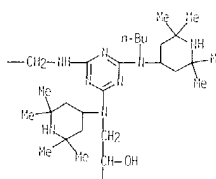


L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



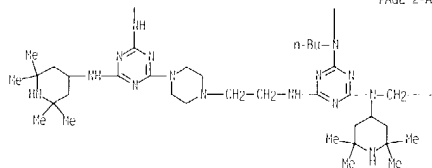
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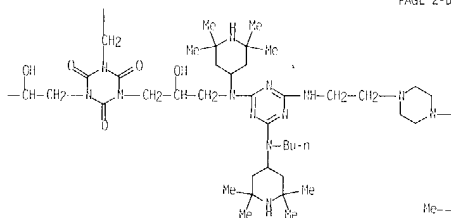
RN 162782-61-8 CAPLUS
 CN 1,3,5-Triazine-2,4,6-tris[3-[[4-[1,3,5-triazin-2-yl]-4,6-bis[2,2,6,6-tetramethyl-4-piperidinyl]amino]-1,3,5-triazin-2-yl]]-1-piperazinyl]ethyl]amino]-6-[butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]]-2-hydroxypropyl]- (9C1) (CA INDEX NAME)

L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A

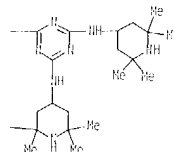


PAGE 2-B



L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-C



IT 162782-53-8P 162782-66-3P 162782-68-5P
162782-72-1P

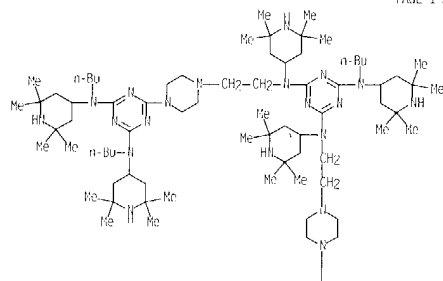
RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); SPH (Synthetic preparation); TEM (Technical or engineered material use); PRLP (Preparation); USES (Uses)
(Preparation of piperidine- and triazine-containing oligomeric compds. antioxidants)

RN 162782-53-8 CAPLUS

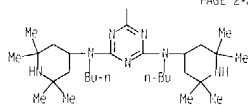
CN 1,3,5-triazine-2,4,6-triazine, N,N'-bis[2-[4-[4,6-bis(butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino)-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N''-butyl-N,N',N''-tris(2,2,6,6-tetramethyl-4-piperidinyl)-(9CI) (CA INDEX NAME)

L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

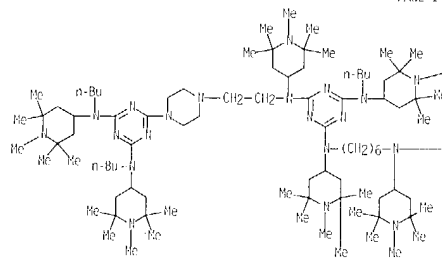


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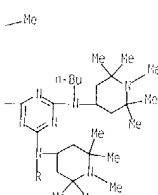


L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



PAGE 1-B

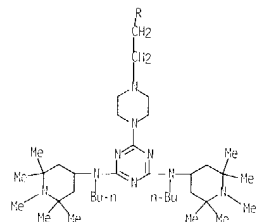


RN 162782-66-3 CAPLUS

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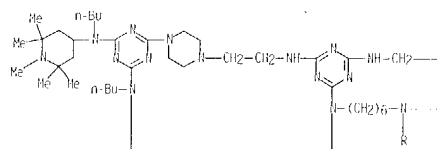
L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



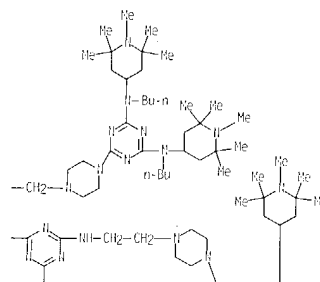
RN 162782-68-5 CAPLUS
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 (CA INDEX NAME)

PAGE 1-A

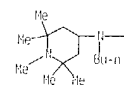
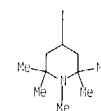
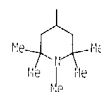


L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B

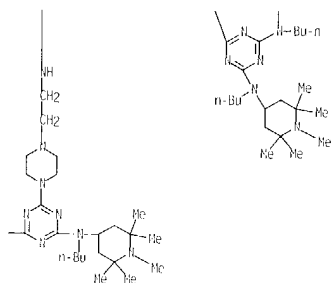


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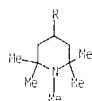


L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-B



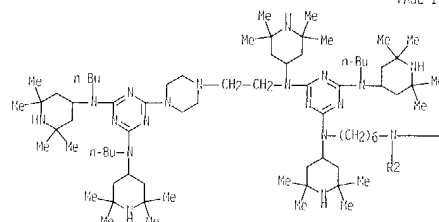
PAGE 3-A



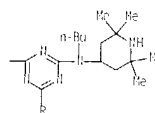
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L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

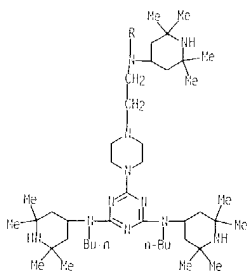


PAGE 1-B



L5 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



PAGE 3-A



L5 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:408523 CAPLUS

UN 122:160691

TI Preparation of piperidine and triazine containing compounds as light, heat and oxidation stabilizers for organic materials.

IN Vignali, Graziano; Guizzardi, Fabrizio; Zagnoni, Graziano

PA Ciba-Geigy S.p.A., Switzerland

SO Eur. Pat. Appl., 35 pp.

CODEN: EPXBGW

DT Patent

LA English

FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DAIF
PI FP 627428	A1	19911207	EP 1994-810300	19940525
R: BE, DE, ES, FR, GB, IT, JP				
US 5119776	A	19950912	US 1994-249004	19940525
CA 2124919	AA	19941204	CA 1994-2124919	19940601
JP 07002042	A2	19950106	JP 1994-142392	19940601
BR 9402143	A	19950307	BR 1994-2143	19940601
PRAT IT 1993-M11164	A	19930603		
OS MARPAT 122:160691				
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. [I: R1 = H, alkyl, 0, OH, CH2CN, alkoxy, cycloalkoxy, alkenyl, (substituted) phenylalkyl, aliphatic acyl; A = 0, (alkyl)imino; X = C1-10 alkylene; R3 = H, alkyl, (substituted) cycloalkyl, phenylalkyl, etc.; R4 (3), RHRN, R100, etc.; R8, R9 = R3; R10 = R3, alkenyl, (substituted) Ph; n = 2-4; R5 = NR1X1NR13, NR18X2N(X3NR23)rx4NR21, NR27X5MX6NX7NR31, etc.; R11, R13, R18, R21, R23, R27, R31, R3, etc.; X1 = alkylene, cycloalkylene, cycloalkylenealkylene, phenylenealkylene, etc.; X2-X7 = alkylene; r = 0, 1], were prepared. Thus, N-(2,2,6,6-tetramethyl-4-piperidinyl)glycine 2,2,6,6-tetramethyl-4-piperidyl ester was added slowly to cyanuric chloride in mesitylene at 0°, the mixture was stirred 2 h at ambient temperature, treated with K2CO3, and heated 1 h at 80°. The mixture was cooled to ambient and treated with N,N'-bis(2,2,6,6-tetramethyl-4-piperidyl) 1,6-hexanediamine followed by 2 h reflux, addition of K2CO3, and a further 10 h reflux to give title compound II. Polypropylene sheets containing 1 g (1/1000 g polypropylene showed a time to fracture of 1470 h at 180°, vs. 510 h in the absence of II.

IT 161460-49-7P

RL: MOD (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

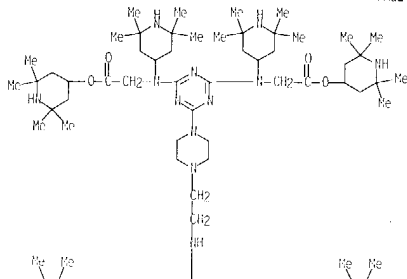
L5 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

(prepn. of piperidine and triazine contg. compds. as light, heat and oxidn. stabilizers for org. materials)

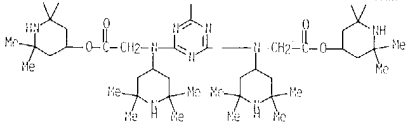
RN 161460-49-7 CAPLUS

CH Glycine, N,N'-[6-[4-[[[4,6-bis[[2-oxo-2-[(2,2,6,6-tetramethyl-4-piperidinyl)oxy]ethyl]](2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazine]-2,4-diyl]bis[N-(2,2,6,6-tetramethyl-4-piperidinyl)-, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester (9C1) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L5 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:497119 CAPLUS

UN 119:97119

TI Radiation-resistant polyolefin compositions

IN Nakahara, Yutaka; Maruna, Toru; Yoshikawa, Kazumi; Takeuchi, Takashi

PA Asahi Denka Kogyo KK, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

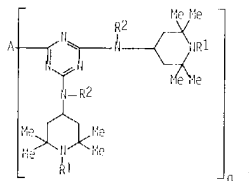
CODEN: JKXXAF

DT Patent

LA Japanese

FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05013745	A2	19930223	JP 1991-202025	19910812
PRAT JP 1991-202025		19910812		
GI				



AB Title compds. contain hindered amines I (A = 2,4-valent organic amine residue; A is bonded to triazine ring via N and may contain N not being bonded to triazine ring; n = 2-4; R1 = H, C1-8 alkyl, C1-8 acyl, 0 free radical; R2 = H, C1-18 alkyl). Thus, a composition containing Profa 6501 100, Ca stearate 0.05, bis(2,4-di-tert-butylphenyl) phosphite 0.2, and I (A: H2CCH12NH, R1 = H, R2 = -CH2-, n = 2) 0.2 part was pelletized and injection molded to give a test piece showing good retentions of yield strength, breaking strength, and elongation and discoloration and heat resistance after irradiation with γ-ray.

IT 130997-29-4

RL: USES (Uses)

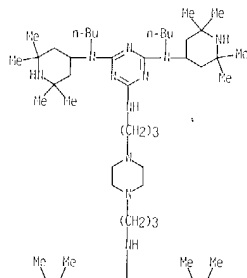
(radiation stabilizers, for polyolefins)

RN 130997-29-4 CAPLUS

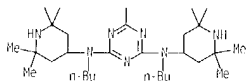
CH 1,3,5-Triazine-2,4,6-triamine, N,N'-[(1,4-piperazinediyl)di-3,1-propanediyl]bis[N,N'-di-tert-butyl-N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)

L5 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



L5 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:490328 CAPLUS

IN 117:90328

TI Preparation of diamino-s-triazinone derivatives for self-extinguishing polymeric compositions

IN Cipolli, Roberto; Nuccia, Gilberto; Nasarati, Farica; Griani, Roberto; Pirazzi, Mario

PA Ministero dell'Universita' e della Ricerca Scientifica e tecnologica, Italy

SO Eur. Pat. Appl., 39 pp.

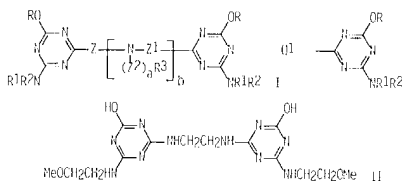
CODEN: EPXXGW

DT Patent

LA English

FAN, CRT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FP 475367	A1	19920318	EP 1991-115308	19910910
EP 475367	B1	19960320		
R: AT, BE, CH, DE, ES, FR, GR, LI, NL, SE				
US 5310907	A	19910510	US 1991-756921	19910909
CA 2051080	AA	19920312	CA 1991-2051080	19910910
AI 135696	F	19960415	AF 1991-115308	19910910
ES 2084740	I3	19960516	ES 1991-115308	19910910
AU 9163836	A1	19920319	AU 1991-83836	19910911
AU 612528	B2	19931021		
JP 06087840	A2	19910329	JP 1991-237040	19910911
US 5314938	A	19910524	US 1993-16856	19930210
PRAI JT 1990 21420		19900911		
US 1991-756921		19910909		
OS WARPAT 117:90328				
GI				



AB title compds. I [R = H, C2-6 alkenyl, C6-12 cycloalkyl, C6-12 aryl, C7-12

L5 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

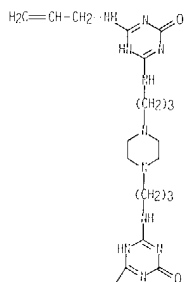
alkyl, etc.; R1, R2 = H, C1-18 alkyl, C2-8 alkenyl, C6-16 cycloalkyl, etc.; NR1R2 = heterocycl which may contain another heteroatom; a = 0, 1; b = 0-5; R3 = Q1; Z = (substituted) 1,4-piperazinyliene, R4R5R6R7R8, etc., when b = 0; other groups defined when b = 1-5; r = 2-14; R9 = H, C1-4 alkyl, C2-6 alkenyl, etc.] were prep'd. as flameproofing agents for self-extinguishing polymeric comp's. Thus, ethylenediamine was added to a soln. of cyanuric acid chloride followed by addn. of NaHCO3 and 2-methoxyethylamine. NaOH was added over 2 h and the mixt. was stirred 1 h. HCl was then added to the mixt. which was refluxed 6 h to give little comp'd. II. A polypropylene polymer comp'n. contg. 4.2% II gave oxygen index of 32.0 (ASTM D-2863-77) and UL 94 std. rating of V0 in the vertical burning test.

IT 142279-14-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as flameproofing agent for self-extinguishing polymers)

RN 142279-14-9 CAPLUS

CN 1,3,5-Triazin-2(1H) one, 4,4'-[1,4-piperazinediyl]bis(3,1-propanediylimino)bis[6-(2-propenylamino)- (9C1) (CA INDEX NAME)



PAGE 1-A



PAGE 2-A

L5 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:215685 CAPLUS

IN 116:215685

TI Weather resistant polyolefin-olefin rubber blends

IN Nakahara, Yutaka; Haruna, Ioru; Sugibuchi, Kazuo

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

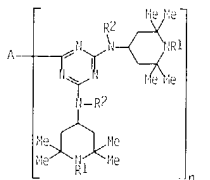
CODEN: JKXXAF

DT Patent

LA Japanese

FAN, CRT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 03275746	A2	19911206	JP 1990-74036	19900323
PRAI JP 1990-74036		19900323		
GI				



AB The title blends contain 0.001-5 ph hindered amine I (A = organic group; R1 = H, alkyl, acyl, 0; R2 = H, alkyl; n = 2-4), 50-95 parts crystalline polyolefin, and 50-5 parts C2H4-α-olefin rubbers. Thus, a blend of 7:93 C2H4-C3H6 copolymer 70, 75:25 EPR 30, additives 0.25, and I (A H3CCH2CH2CH2, R1 = H, R2 = Bu, n = 2) (II) 0.3 part had time to cracking in a Weatherometer at 83° 1120 h and yellowness index 6.3 and 9.5 after 0 and 480 h weathering, resp. vs. 660, 10.4, and 16.9, resp., with bis(2,2,6,6-tetramethyl-4-piperidinyl) sebacate in place of II.

IT 130997-29-4

RI: USFS (Uses)

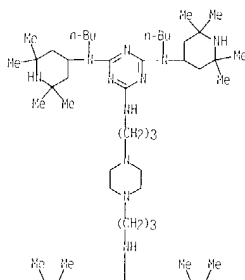
(light stabilizers, for polyolefin blends with olefin rubbers)

RN 130997-29-4 CAPLUS

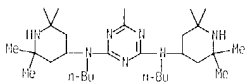
CN 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl)di-3,1-propanediylbis[N,N''-diethyl-N,N'' bis(2,2,6,6-tetramethyl 4-piperidinyl)- (9C1) (CA INDEX NAME)

15 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



15 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:215641 CAPLUS

BN 116:215641

TI Salts of triazine derivatives with oxygenated acids of phosphorus and their use in self-extinguishing polymeric compositions

IN Cipolli, Roberto; Nasarati, Enrico; Nucida, Gilberto; Oriani, Roberto; Pirozzi, Mario

PA Ministero dell'Universita' e della Ricerca Scientifica e Tecnologica, Italy

SO Eur. Pat. Appl., 53 pp.

CODEN: LPXXDW

DT Patent

LA English

FAN: CNT 1

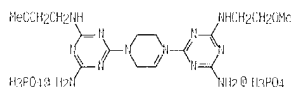
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 466137	A2	19920115	EP 1991 111506	19910710
EP 466137	A3	19920101		
EP 466137	B1	19960417		
R: AT, BF, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
US 5359064	A	19941025	US 1991-727710	19910710
AT 136891	E	19960615	AT 1991-111506	19910710
AU 6180367	A1	19920116	AU 1991-80367	19910711
AU 636992	B2	19930513		
CA 2046782	AA	19930112	CA 1991-2046782	19910711
JP 06340770	A2	19941213	JP 1991-197176	19910711
US 5403877	A	19950404	US 1993-108033	19930818

PRAI 11 1990-20919

US 1991-727710

OS MARPAT 116:215641

CI



AB Salts of bis(diaminotriazine) derivs. of 0 containing P acids are intumescent flame retardants of the char-forming type and are used without other additives to prepare self-extinguishing polymer or elastomer compns. Thus, a composition containing isotactic polypropylene /2.1 (prepared in 4 steps from cyanuric chloride 13.5), Exolit 422 13.5, and antioxidant 1 part was molded to 3-mm specimens at 40 kg/cm² to show limiting O index (ASTM D7863) 33.2 and UL 94 (3 mm) V0.

15 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

IT 140639-27-6P

RL: PREP (Preparation)
(preparation of, as intumescent fireproofing agents for polymers and rubbers)

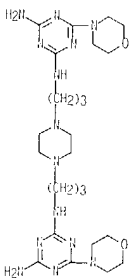
RH 140639-27-6 CAPLUS

CH 1.3.5-Triazine-2,4-diamino, N,N'-[(1,4-piperazinediyl)di-3,1-propanediyl]bis[6-(4-morpholinyl)-], phosphate (1:2) (9C1) (CA INDEX NAME)

CM 1

CRN 135783-75-4

CMF C24 H42 N14 O2



CM 2

CRN 7664-38-2

CMF H3 O4 P



15 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:559184 CAPLUS

BN 115:159184

TI Preparation of piperidine-triazine compounds as stabilizers for organic materials

IN Borzatta, Valerio

PA Ciba Geigy A.-G., Switz.; Ciba-Geigy S.p.A.

SO Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN: CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 435828	A1	19910703	EP 1990 811007	19901219
EP 435828	B1	19950125		
R: SE, DE, FR, GB, IT, NL				
US 5102928	A	19920107	US 1990-630100	19901219
CA 2033128	AA	19910629	CA 1990-2033128	19901224
JP 04288074	A2	19921013	JP 1990-417092	19901228

PRAI 11 1989-22866

IT 19891728

CI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [1, R1, R5 = isooctylamino, N-(2,2,6,6-tetramethyl-4-piperidiny)butylamino, etc.; R2, R5 = 2,2,6,6-tetramethyl-4-piperidiny], etc.; R3, R4 = alkylene, etc.; R7 = O, etc.; X = a group defined for R1; Y = O1, etc.; m = 0, 1; n = 0-4; p = 1-50], useful as light and heat stabilizers, and antioxidants for organic materials, are prepared. Morpholine was added to a soln of cyanuric chloride in xylene with stirring at 10° and 25°, aqueous NaOH was added with stirring, aqueous phase was separated, N,N'-bis[3-(2,2,6,6-tetramethyl-4-piperidylamino)propyl]piperazine were added to a xylene solution, heated at 80°, NaOH was added, and the mixture refluxed to give II. Also prepared were V addnl. I, which were each incorporated into a polymer fiber to show excellent light stability at 63°.

IT 136161-86-9P 136161-87-9P 136161-88-1P

136214-08-9P 136292-58-5P

RL: SPH (Synthetic preparation); PREP (Preparation)

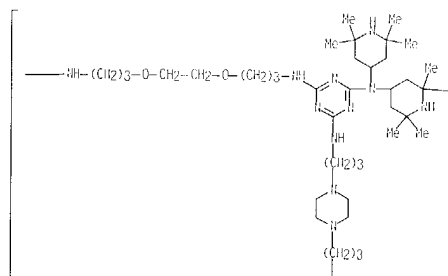
(preparation of, as monomer for light and heat stabilizer)

RH 136161-86-9 CAPLUS

CH Poly[[6-[bis(2,2,6,6-tetramethyl-4-piperidiny)amino]-1,3,5-triazine-2,4-diy]imino-1,3-propanediyl-1,4-piperazinediyl-1,3-propanediylimino[6-[bis(2,2,6,6-tetramethyl-4-piperidiny)amino]-1,3,5-triazine-2,4-diy]imino-1,3-propanediyl-1,2-ethanediyl-1,3-propanediylimino] (9C1) (CA INDEX NAME)

L5 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

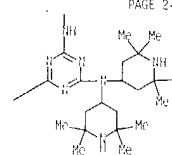


PAGE 1-B

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L5 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



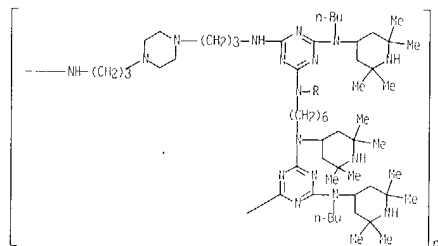
PAGE 2-B



RN 136161-87-0 CAPLUS
 CH Poly[[6-[bis(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazine-2,4-diyl][1,4-piperazinediyl-1,3-propanediylimino] (9C1) (CA INDEX NAME)]

L5 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



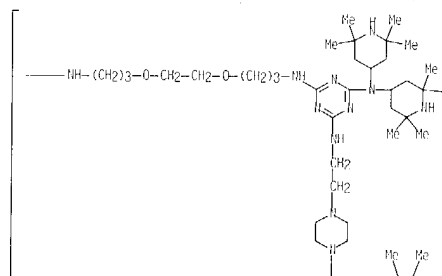
PAGE 2-A



RN 136161-88-1 CAPLUS
 CH Poly[[6-[bis(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazine-2,4-diyl][1,4-piperazinediyl-1,2-ethanediylimino]Co[bis(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazine-2,4-diyl]imino-1,3-propanediyl-1,2-ethanediyl-1,3-propanediylimino] (9C1) (CA INDEX NAME)]

L5 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

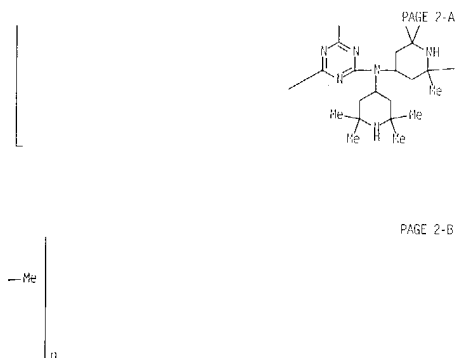
PAGE 1-A



PAGE 1-B

Me

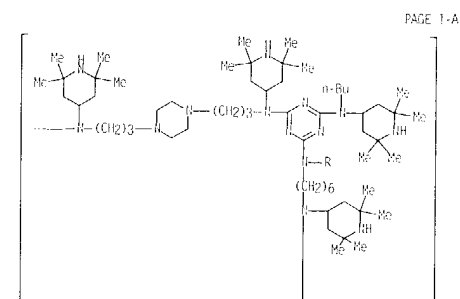
L5 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 136214-08-9 CAPLUS

CN Poly[[6-(butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino)-1,3,5-triazine-2,4-diyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]-1,6-hexandiyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino][6-(butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino)-1,3,5-triazine-2,4-diyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]-1,3-propanediyl-1,4-piperazinediyl-1,3-propanediyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]] (9CI) (CA INDEX NAME)

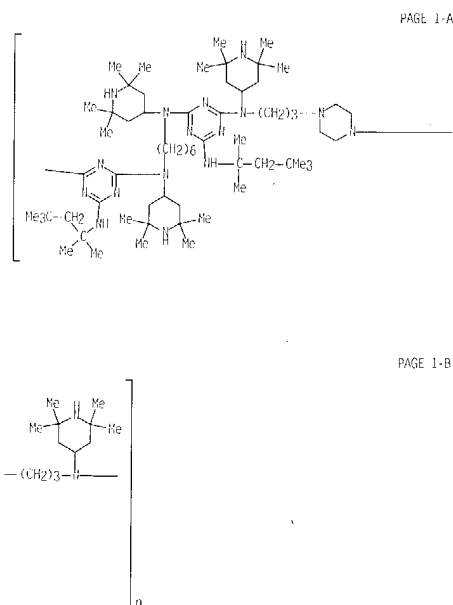
L5 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 136292-58-5 CAPLUS

CN Poly[[6-[(1,1,3,3-tetramethylbutyl)amino]-1,3,5-triazine-2,4-diyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]-1,6-hexandiyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino][6-[(1,1,3,3-tetramethylbutyl)amino]-1,3,5-triazine-2,4-diyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]-1,3-propanediyl-1,4-piperazinediyl-1,3-propanediyl][(2,2,6,6-tetramethyl-4-piperidinyl)imino]] (9CI) (CA INDEX NAME)

L5 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L5 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:515737 CAPLUS

DI 115:115/37

TI 2,4,6-Triamino-1,3,5-triazine derivative-phosphate and/or phosphonate mixtures for self-extinguish polymer compositions

IN Cipolli, Roberto; Masarati, Enrico; Nucida, Gilberto; Pirozzi, Mario; Orlandi, Roberto

PA Ministero dell' Università e della Ricerca Scientifica e Tecnologica, Italy

SO Eur. Pat. Appl., 40 pp.

COREN: EPXXDW

DI Patent

LA English

FAN,CN1 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 415371	A2	19910306	EP 1990-116512	19900820
EP 415371	A3	19920429		
R: AU, BE, CH, DE, DK, ES, FR, GB, IT, NL, SE				
AU 9061365	A1	19910228	AU 1990-61365	19900827
AU 627615	B2	19920827		
CA 2024077	AA	19910301	CA 1990-2024077	19900827
JP 03149262	A2	19910625	JP 1990-226147	19900828
JP 2926642	B2	19990728		
KR 130486	R1	19980407	KR 1990-13309	19900828
US 5223560	A	19930629	US 1992-917553	19920721
PRA1	11	1989-21562	A	19890828
IT 1990-19839	A	19900327		
US 1990-572601	R1	19900327		

AB Title compns. comprise thermoplastic polymer 45-89, ammonium and/or amine phosphate(s) and/or phosphonates 8-30 and 2,4,6-triamino-1,3,5-triazine diamin derivative(s), 3-25%. A triazine compound (I), prepared by charging aqueous H₂O into reaction product of cyanuric acid chloride and cyclohexylamine and reacting with piperazine, had m.p. 265-268°. A composition, prepared from a mixture of 1,3,5-isotactic polypropylene (melt flow index 12) 70, 2:1 dilauryl thiopropionate-pentamethylthiol tetra(3,5-di-tert-butyl-1-hydroxyphenyl)propanoate mixture 1, and ammonium polyphosphonic acid 20.77, had limiting O index 37.6 and UL 94 flame test rating V-0.

II 135783-75-4

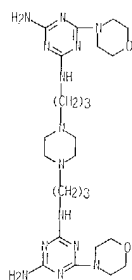
R1: USES (Uses)

(thermoplastics containing phosphates and/or phosphonates and, fire-resistant and intumescent)

RN 135783-75-4 CAPLUS

CN 1,3,5-Triazine-2,4-diamine, N,N'-[(1,4-piperazinediyl)di-3,1-propanediyl]bis[6-(4-morpholinyl)]- (9CI) (CA INDEX NAME)

15 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

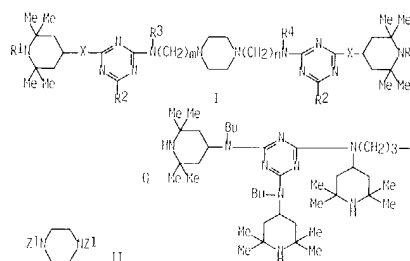


15 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1991:122419 CAPLUS
 DN 114:122419
 TI Preparation of triazine derivatives as stabilizers for polymers
 IN Cantatore, Giuseppe; Borzatta, Valerio
 PA Ciba-Geigy A.-G., Saitz.; Ciba-Geigy S.p.A.
 SO Eur. Pat. Appl., 10 pp.
 CODE: FPXXDX

DT Patent
 LA English

FAH CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
P1 EP 376886	A1	1990/04	EP 1989-810957	19891214
EP 376886	B1	19930728		
R: RF. DE. FR. GB. IT. NL				
CA 2006401	AA	19900623	CA 1989-2006401	19891221
US 5039722	A	19910313	US 1989-454083	19891221
BR 8906609	A	19900911	BR 1989-6609	19891222
JP 02721773	A2	19900904	JP 1989-334698	19891223
PRAI IT 1989-23071		19881223		
OS MARPAT 114:122419				
GI				

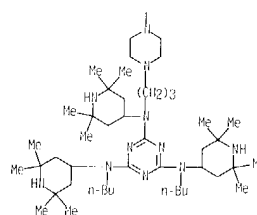


AB The title compds. I [R1 = H, C1-8 alkyl, OH, NO, etc.; R2 = OR5, SR5, etc.; R5 = C1-18 alkyl, C3-18 alkyl interrupted by O, etc.; R3, R4 = H,

L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 C1-18 alkyl, etc.; m, n = 2-6; X = O, (substituted NH) were prepd. A mixt. of 2-chloro-4,6-bis[(N-2,2,6,6-tetramethyl-4-piperidinyl)butylamino]-1,3,5-triazine, NaOH, and N,N'-bis-[3-(2,2,6,6-tetramethyl-4-piperidinylamino)propyl]piperazine in mesitylene was refluxed for 20 h with azeotropic removal of H2O to give piperazine deriv. II (Z1 = O). For polypropylene plaques contg. 0.1% II, the time to fracture was 1530 h, vs. 250 h in the absence of stabilizer.
 IT 130997-27-2P 130997-28-3P 130997-29-4P
 130997-30-7P 130997-31-8P 130997-32-9P
 130997-33-0P 130997-34-1P 131049-35-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as stabilizer for polymer)
 RN 130997-27-2 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N',N''-dibutyl-N,N'''-tris(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

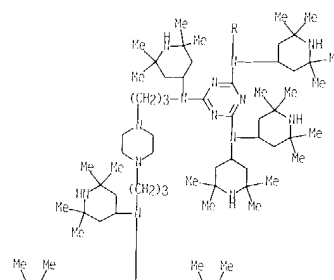
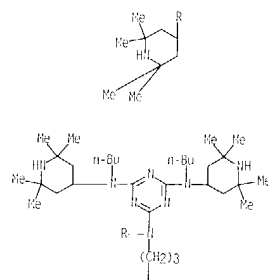
L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



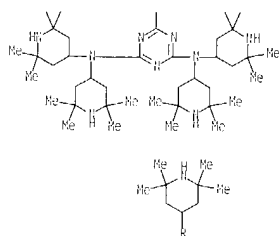
RN 130997-28-3 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N',N''-dibutyl-N,N'''-pentakis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



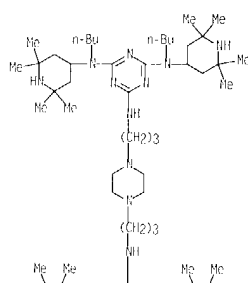
L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



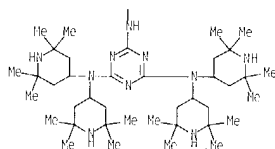
RH 130997-29-4 CAPLUS
 CH 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N,N''-diethyl-N,N'''-bis(2,2,6,6-tetramethyl-4-piperidinyl)]-(9C1) (CA INDEX NAME)

PAGE 1-A



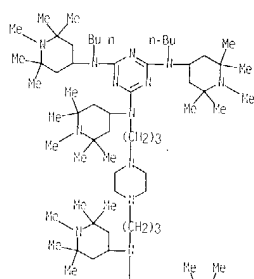
L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A

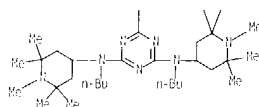


RH 130997-31-8 CAPLUS
 CH 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N,N''-diethyl-N,N'''-bis(2,2,6,6-pentamethyl-4-piperidinyl)]-(9C1) (CA INDEX NAME)

PAGE 1-A

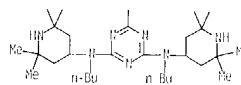


PAGE 2-A



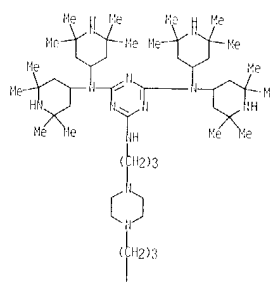
L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



RH 130997-30-7 CAPLUS
 CH 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N,N''-diethyl-N,N'''-bis(2,2,6,6-tetramethyl-4-piperidinyl)]-(9C1) (CA INDEX NAME)

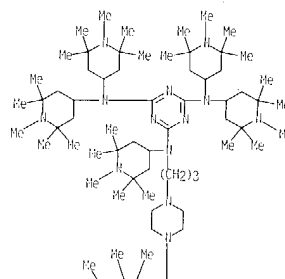
PAGE 1-A



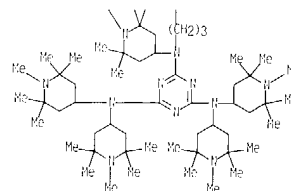
L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RH 130997-32-9 CAPLUS
 CH 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N,N''-diethyl-N,N'''-bis(2,2,6,6-pentamethyl-4-piperidinyl)]-(9C1) (CA INDEX NAME)

PAGE 1-A



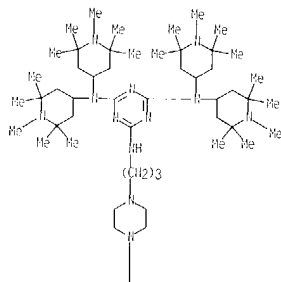
PAGE 2-A



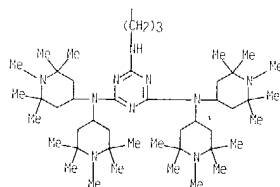
RH 130997-33-0 CAPLUS
 CH 1,3,5-Triazine-2,4,6-triamine, N,N'''-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N,N''-diethyl-N,N'''-bis(2,2,6,6-pentamethyl-4-piperidinyl)]-(9C1) (CA INDEX NAME)

L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

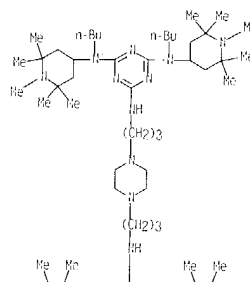


RN 130997-34-1 CAPLUS

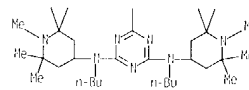
CN 1,3,5-Triazine-2,4,6-triamine, N,N''-(1,4-piperazinediylid-3,1-propanediyl)bis[N,N''-diethyl N,N''-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

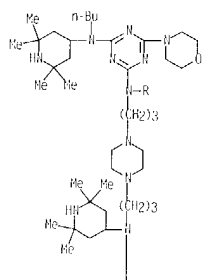


RN 131019-35-9 CAPLUS

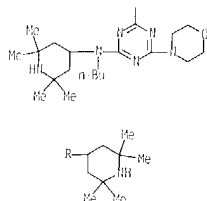
CN 1,3,5-Triazine-2,4-diamine, N,N''-(1,4-piperazinediylid-3,1-propanediyl)bis[N,N''-butyl-6-(4-morpholinyl)-N,N''-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



L5 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:218135 CAPLUS

DN 112:218135

TI Addition of hindered piperidine stabilizers during polymerization

IH Muelhaupt, Rolf; Rody, Jean; Slongo, Mario

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 16 pp.

CODEN: CPXXDW

DI Patent

LA German

FAN: CNT 1

PATENT NO.	RIND	DATE	APPLICATION NO.	DATE
PT EP 350444	A1	19900110	EP 1989-810480	19890621
R: AT, BE, DE, ES, FR, GB, IT, NL, SE				
AU 8936690	A1	19900614	AU 1989-36690	19890621
AI 671630	B2	19920319		
DD 297832	A5	19920123	DD 1989-330071	19890528
ZA 8904936	A	19900328	ZA 1989-4936	19890629
BR 8903236	A	19900713	BR 1989-3236	19890630
CH 1039605	A	19900214	CH 1989-104462	19890630
JP 82053807	A2	19900222	JP 1989-169746	19890630
US 5244948	A	19930914	US 1992-881322	19920507
PRAI CH 1988-2502		19880630		
US 1989-37162		19890626		
US 1990-560248		19900727		
US 1991-701661		19910520		

OS MARPAT 112:218135

AB Polyolefins prepared by low pressure polymerization using Mg halide-modified Ziegler-Natta catalysts are stabilized (i.e. against heat) by adding s-triazine derivs. of hindered piperidines to the polymerization. Polymerization of C₃H₆ using a MgCl₂-TiCl₄-AlEt₃-PhSi(OEt)₃ catalyst at 70° with gradual addition of 0.45 g of 2-(diethylamino)-4,6-bis[butyl(1,2,2,6,6-pentamethyl-1-piperidinyl)amino]-1,3,5-triazine (I) in 50 mL hexane gave polypropylene with catalyst activity 45.5 kg/g. Isotacticity 97.1%, intrinsic viscosity 1.9 dL/g, melt index 6.6 g/10 min, yellowness index 2.2, and coextrusion time at 135 and 150° >100 and 180 h, resp., vs. 45.5, 97.0, 1.8, 15, 4.5, 0.75, and 0.5, resp., without addition of I.

IT 93676-07-4 121185-93-1 121206-01-7

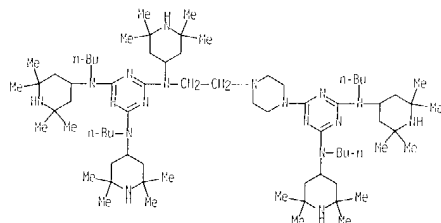
RL: USLS (Uses)

(heat stabilizers for polyolefins, addition of, in Ziegler-Natta polymerization)

RN 93676-07-4 CAPLUS

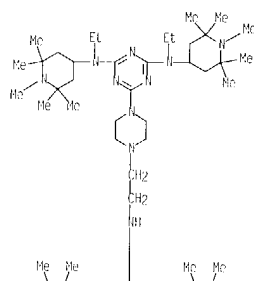
CN 1,3,5-Triazine-2,4,6-triamine, N-[2-[4-[4,6-bis[butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl] N,N''-diethyl-4,4''-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RW 121185-93-1 CAPLUS

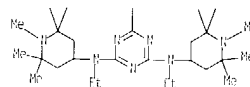
CN 1,3,5-triazine-2,4,6-triamine, N'-[2-[4-[4,6-bis[ethyl(1,2,2,6,6-pentamethyl-4-piperidyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-dimethyl-N,N'-bis(1,2,2,6,6-pentamethyl-4-piperidyl)- (9C1) (CA INDEX NAME)



PAGE 1-A

L5 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2001 ACS on STN (Continued)

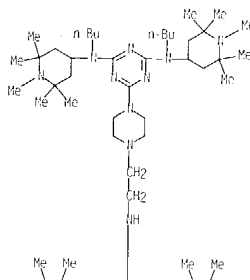
PAGE 2-A



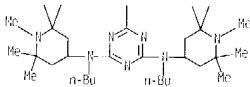
RI 121206-01-7 CAPLUS

CN 1,3,5-triazine-2,4,6-triamine, N'-[2-[4-[4,6-bis[butyl(1,2,2,6,6-pentamethyl-4-piperidyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-dibutyl-N,N'-bis(1,2,2,6,6-pentamethyl-4-piperidyl)- (9C1) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L5 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L5 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

RI 1990:37354 CAPLUS

DI 117:37354

TI Process for the methylation of triazine compounds containing 2,2,6,6-tetramethylpiperidine groups

IN Piccinelli, Piero; Orban, Ivan; Holer, Martin; Borzatta, Valerio

PA Ciba-Geigy A.-G., Switz.; Ciba-Geigy S.p.A.

SO Eur. Pat. Appl., 79 pp.

CODEN: EPXXDW

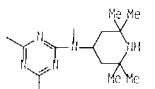
DI Patent

LA English

FAN: CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 319480	A2	19890607	EP 1988-810815	19881129
EP 319480	A3	19900530		
EP 319480	B1	19940126		
R: BC, DL, FR, GB, IT, NI				
BR 886354	A	19890822	BR 1988-6354	19881202
CA 1319690	A1	19930629	CA 1988-584926	19881202
JP 01190678	A2	19890731	JP 1988-306794	19881203
JP 2736792	B2	19900402		
KR 130901	B1	19900423	KR 1988-16147	19881203
US 5130429	A	19920714	US 1991-800371	19911127
PRAI IT 1987-22888	A	19871204		
US 1988-273/83	B1	19881121		
US 1990-586329	B1	19900918		

G1



AB Comps. bearing the I group are methylated by a mixture of CH₂O and HCOOH in aromatic solvents. These methylated comps. are useful as heat and light stabilizers. Thus, adding 0.4 mol N-(2,2,6,6-tetramethyl-4-piperidyl)butylamine to 0.2 mol cyanuric chloride in 250 mL xylene at 10°, stirring for 1 h, adding 0.42 mol NaOH in 70 mL water, heating at 80° for 2 h, adding 0.1 mol 1,6-hexanediamine and 0.3 mol NaOH, refluxing with removal of water, adding 150 mL water, separating the aqueous phase, adding 0.43 mol HCOOH and 0.44 mol paraformaldehyde in 24.5 mL 2% aqueous NaOH solution, and heating gave N,N'-bis[2,4-bis[N-(1,2,2,6,6-pentamethyl-4-piperidyl)butylamino]-1,3,5-triazin-6-yl]-1,6-hexanediamine.

IT 121185-93-IP 121185-94-2P 121206-01-7P

121206-02-8P

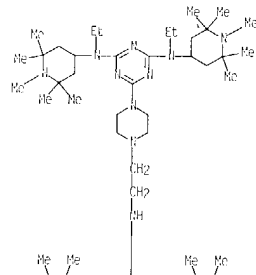
RI: PREP (Preparation)

L5 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

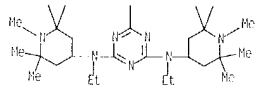
(prepn. of, for heat and light stabilizers)

RN 121185-93-1 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N''-[2-[4-[4,6-bis[ethyl(1,2,2,6,6-pentamethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-diethyl-N,N'-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



PAGE 1-A



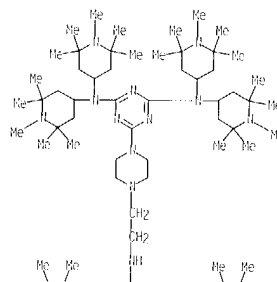
PAGE 2-A

RN 121186-94-2 CAPLUS

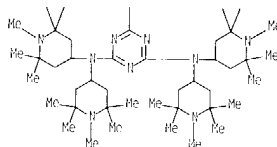
CN 1,3,5-Triazine-2,4,6-triamine, N''-[2-[4-[4,6-bis[bis(1,2,2,6,6-pentamethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N',N',N'-tetrakis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

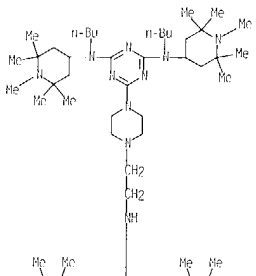


RN 121206-01-7 CAPLUS

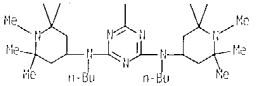
CN 1,3,5-Triazine-2,4,6-triamine, N''-[2-[4-[4,6-bis[butyl(1,2,2,6,6-pentamethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-dibutyl-N,N'-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

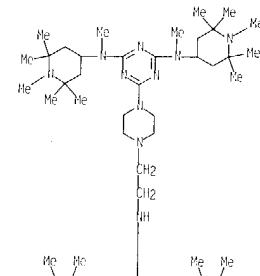


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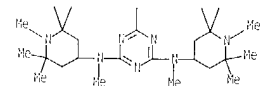


L5 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



RN 121206-02-8 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N''-[2-[4-[4,6-bis[ethyl(1,2,2,6,6-pentamethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-diethyl-N,N'-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989-408402 CAPLUS

DN 111:8402

TI Compounds containing piperidine, triazine, and piperazine rings as stabilizers for synthetic polymers

IN Cantatore, Giuseppe; Roncalia, Valerio; Masina, Franca

PA Ciba-Geigy A.-G., Switz.; Ciba Geigy S.p.A.

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDX

DT Patent

LA English

FALL CHT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 299925	A1	19890118	EP 1988-010473	19880711
	EP 299925	B1	19921202		
	R: BE, DE, FR, GR, IT, NL				
	US 4823070	A	19891128	US 1988-217262	19900711
	CA 1306460	A1	19920810	CA 1989-5/1952	19880714
PRAI	JP 01031980	A2	19890206	JP 1988-176861	19900715
	JP 2/04633	B2	19980126		
	KR 121755	B1	19971127	KR 1988-8961	19900716
	US 4992493	A	19910212	US 1989-403559	19890906
	IT 1987-21320	A	19870716		
DS	US 1988-217967	A3	19880711		
MA	MARPAT 111:8402				

G1 For diagram(s), see printed CA Issue.

AB Comps. I (R1 = alkoxy, allylamino, substituted piperidylamino, etc.; R2 = H, alkyl, etc.; R3 = H, alkyl, substituted piperidyl, etc.; R4 = H, alkyl, cycloalkyl; n = 2-6) are prepared for use as heat and light stabilizers for organic materials such as polymers. Cyanuric chloride, [(2,2,6,6-tetramethyl-4-piperidinyl)amino]methane, and N-(2-aminoethyl)piperazine were used to prepare I [R1 = N-methyl-N-(2,2,6,6-tetramethyl-4-piperidinyl)amino; R2 = R4 = H; R3 = Me; n = 2] (II). Polypropylene containing 0.1% II became brittle after 1360 h at 135° in air, vs. 250 without II.

II 121185-88-4P 121185-89-5P 121185-90-8P

121185-91-9P 121185-92-0P 121185-93-1P

121185-94-2P 121206-01-7P 121206-02-8P

RL: PREP (Preparation)

(preparation and antioxidant activity in polymers)

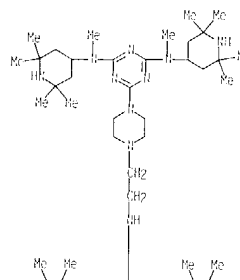
RN 121185-88-4 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4,6-bis[2,2,6,6-tetramethyl-4-piperidinyl]amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-dimethyl-N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

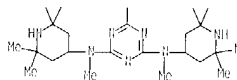
L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

(Continued)

PAGE 1-A



PAGE 2-A



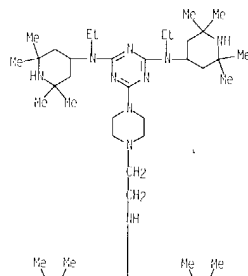
RN 121185-89-5 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4,6-bis[2,2,6,6-tetramethyl-4-piperidinyl]amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-diethyl-N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

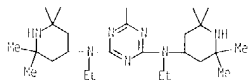
L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

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PAGE 1-A



PAGE 2-A



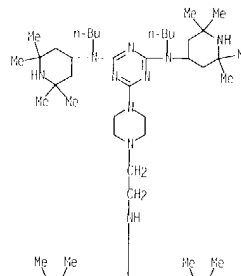
RN 121185-90-8 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4,6-bis[2,2,6,6-tetramethyl-4-piperidinyl]amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-dibutyl-N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

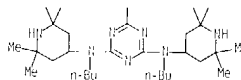
L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

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PAGE 1-A



PAGE 2-A

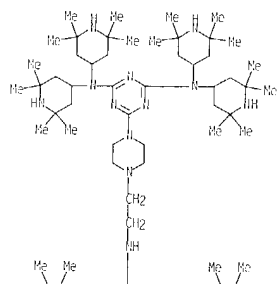


RN 121185-91-9 CAPLUS

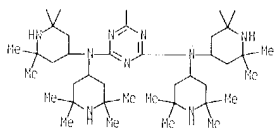
CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4,6-bis[2,2,6,6-tetramethyl-4-piperidinyl]amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-tetrakis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



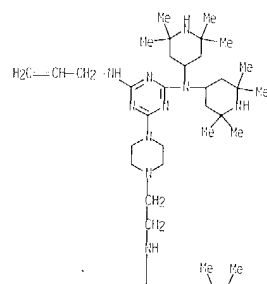
PAGE 2-A



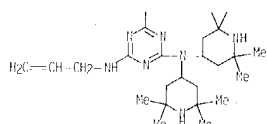
RN 121185-92-0 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4-bis(2,2,6,6-tetramethyl-4-piperidinyl)amino]-6-(2-propenylamino)-1,3,5-triazin-2-yl]-1-piperazinylethyl]-N,N'-2-propenyl-N,N-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)

L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



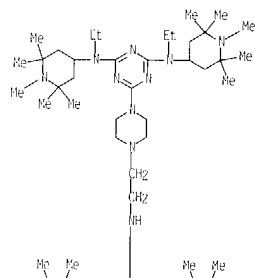
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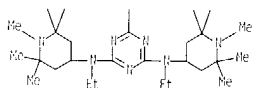
RN 121185-93-1 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4-bis(2,2,6,6-pentamethyl-4-piperidinyl)amino]-6-(2-propenylamino)-1,3,5-triazin-2-yl]-1-piperazinylethyl]-N,N'-2-propenyl-N,N-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)

L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



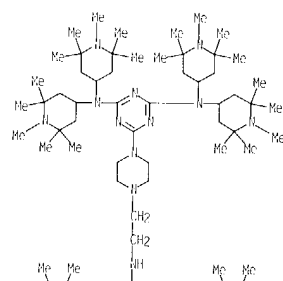
PAGE 2-A



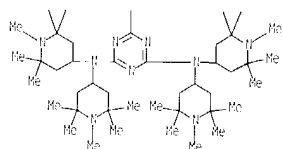
RN 121185-94-2 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)amino]-6-(2-propenylamino)-1,3,5-triazin-2-yl]-1-piperazinylethyl]-N,N'-2-propenyl-N,N-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)

L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



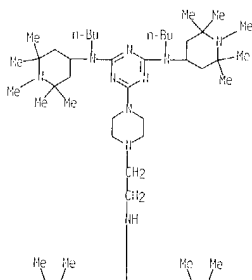
PAGE 2-A



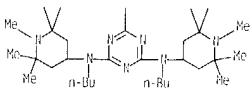
RN 121206-01-7 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)amino]-6-(2-propenylamino)-1,3,5-triazin-2-yl]-1-piperazinylethyl]-N,N'-2-propenyl-N,N-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)

L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



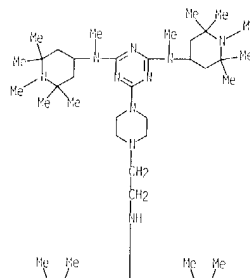
PAGE 2-A



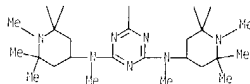
RN 121206-07-8 CAPLUS
 CN 1,3,5-Triazine-2,4,6-triamine, N'-[2-[4-[4,6-bis[methyl(1,2,2,6,6-pentamethyl-4-piperidyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N,N'-dimethyl-N,N'-bis[1,2,2,6,6-pentamethyl-4-piperidyl]- (9CI) (CA INDEX NAME)

L5 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



L5 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1989:632134 CAPLUS
 UR 109:232134
 TI Antioxidant-light stabilizer compositions for synthetic resins
 IN Lai, John T.; Son, Pyong N.
 PA Goodrich, B. F., Co., USA
 SO U.S., 23 pp. Cont., in-part of U.S. 4,547,538.
 CODEN: USXXAN
 DT Patent
 LA English
 FAN: CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4722805	A	19880202	US 1985-721270	19850409
	US 4480992	A	19811030	US 1982-350536	19820219
	US 4517538	A	19851015	US 1984-661901	19841026
PRAI	US 1982-350536		19820202		
	US 1984-661901		19820219		

AB (2-Oxo-1-piperazinyl)triazines (PIP-1), which can be prepared from branched-chain polyalkylenepolyamines having a hindered primary amino group by selective reductive alkylation with ketones, ketoforn cyclization, and reaction with triazines, are useful UV stabilizers, when used in combination with particular hindered phenol antioxidants in resins, providing better resistance to UV light and oxidation. Thus, H₂NCH₂CH₂NHCH₂(CH₂)₂NH₂ was reduced and alkylated with a Pt catalyst in the presence of H and 2-butanone to prepare H₂NCH₂CH₂NHCH₂(CH₂)₂NHCH₂MeEt, which was then mixed with acetone and CHCl₃ in the presence of 18-crown-6 polyether phase-transfer catalyst with added NaOH solution to obtain 1-[2-(sec-butylamino)ethyl]-3,3,5,5-tetramethyl-2-piperazinone (I). Reaction of I with cyanuric chloride gave a PIP-1, i.e., 2,4-dichloro-6-[(1-methylpropyl)[2-(3,3,5,5-tetramethyl-2-oxo-1-piperazinyl)ethyl]amino]-1,3,5-triazine.

IT 96204-42-1

RI: USLS (Uses)

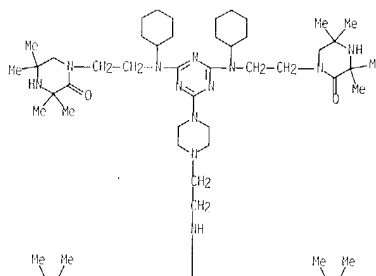
(UV stabilizer, for synthetic resins, manufacture of)

RN 96204-42-1 CAPLUS

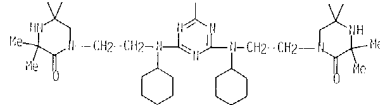
CN Piperazinone, 1,1'-[[6-[4-[2-[[4,6-bis[cyclohexyl[2-(3,3,5,5-tetramethyl-2-oxo-1-piperazinyl)ethyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazine-2,4-diyl]bis[(cyclohexylino)-2,1-ethanediy]]bis[3,3,5,5-tetramethyl- (9CI) (CA INDEX NAME)

L5 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

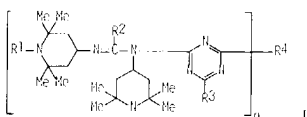


PAGE 2-A



L5 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1988:455915 CAPLUS
 DN 109:55915
 TI Triazine derivatives of piperidinylamidines
 IN Cantatore, Giuseppe; Borzatta, Valerio
 PA Ciba-Geigy A.-G., Switz.; Ciba-Geigy S.p.A.
 SO Eur. Pat. Appl., 29 pp.
 CODEN: EPXXDX
 DI Patent
 LA English
 FAN, CN1 1

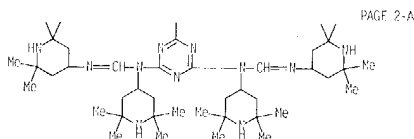
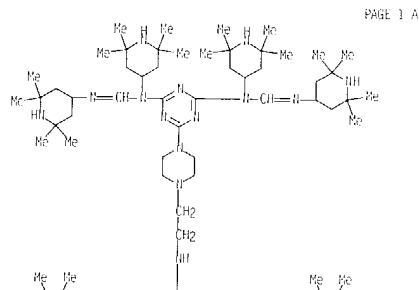
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 250363	A2	19871223	EP 1987-810333	1987/0610
EP 250363	A3	1989/026		
EP 250363	B1	19901128		
R: DE, FR, GB, IT				
US 4813159	A	19890627	US 1987-59650	1987/0608
CA 1283908	A1	19910507	CA 1987-539576	1987/0612
JP 63002909	A2	19880107	JP 1987-150065	1987/0616
JP 08009617	B4	19960131		
PRA1 IT 1986-20790		19860616		
GI				



AB The piperidines I [R1, R2 = OH, Me, R3, R5X or a 5-7 membered N-containing heterocyclic group; R5 = H, C1-18 alkyl, C3-18 alkenyl; X = O, S, NR5; n = 2-6, R4 = N-containing radical] are stabilizers against oxidation or thermal or light-induced degradation. Thus, 61.5 g N,N'-bis-(2,2,6,6-tetramethyl-4-piperidinyl)-formamide was heated with 18.44 g cyanuric chloride in xylene at 50-55° for 2 h, 81.8 g Na2CO3 was added, heated at 70° for 3 h, and 4,4'-methylene bis(cyclohexylamine) (10.52 g) was added and refluxed for 19 h to give N,N'-bis[2,4-bis[N,N''-bis-(2,2,6,6-tetramethyl-4-piperidinyl)-formamido]-1,3,5-triazine-6-yl]-4,4'-methylene-bis(cyclohexylamine) (II). Polypropylene containing 2.5 phr II required 1900 h Weather-O-Meter exposure for a 50% loss of tenacity, vs. 150 without II.

IT 115430-74-5

L5 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (stabilizers, for polymers, manuf. of)
 RH 115430-74-5 CAPLUS
 CN Methanidamide, N,N'-[[6-[4-[2-[[4,6-bis(2,2,6,6-tetramethyl-4-piperidinyl)][[2,2,6,6-tetramethyl-4-piperidinyl]amino]ethyl]amino]-1,3,5-triazine-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazine-2,4-diyl]]bis[N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)-] (9CI) (CA INDEX NAME)



L5 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1986:130930 CAPLUS
 DN 104:130930
 TI Alkylated polyalkylenepolyamines and oxopiperazinyltriazines as uv stabilizers
 IN Lai, John T.; Son, Pyong N.
 PA Goodrich, B. F., Co., USA
 SO U.S., 20 pp. Cont.-in-part of U.S. 4,480,092.
 CODEN: USXXAM
 DI Patent
 LA English
 FAN, CN1 5

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4517538	A	19851015	US 1981-664901	19841026
US 4480092	A	19841030	US 1982-350536	19820219
EP 101735	A1	198640307	EP 1983-902629	19830124
EP 101735	B1	19861029		
R: BE, CH, DE, FR, GR, IT, NL, SE				
CA 1195329	A1	19851015	CA 1983-121028	19830207
US 4722806	A	19880202	US 1985-721770	19850409
US 4639479	A	19870127	US 1985-777999	19850920
AU 8815060	A1	19881027	AU 1988-15060	19880121
AU 612357	B2	19910711		
US 5189173	A	19930223	US 1989-318047	19890302
US 5270471	A	19931214	US 1992-966933	19921027
PRA1 US 1982-350536		19820219		
US 1981-664901		19820219		
US 1985-786765		19851011		
US 1987-103779		19871002		
US 1987-103799		19871002		
US 1989-318047		19890302		

AB Piperazinyl-triazines and oligomers, prepared from polyamines, ketones, and triazines, are light stabilizers. Thus, 2,4-bis(1-piperidinyl)-6-[1-methylpropyl][2-(3,3,5,5-tetramethyl-2-oxo-1-piperazinyl)ethyl]amino]-1,3,5-triazine was prepared by condensing N-(2-amino-2-methylpropyl)-1,2-ethanediamine with 2-butanone, cyclization with acetone, reaction with cyanuric chloride, and condensation with piperidine.

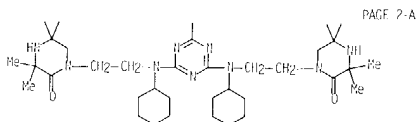
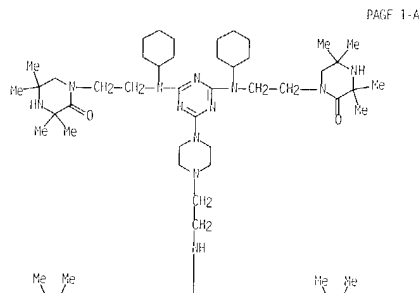
IT 96204-42-1

RL: USFS (Uses)
 (light stabilizer)

RN 96204-42-1 CAPLUS

CN Piperazine, 1,1'-[[6-[4-[2-[[4,6-bis(cyclohexyl)[2-(3,3,5,5-tetramethyl-2-oxo-1-piperazinyl)ethyl]amino]-1,3,5-triazine-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazine-2,4-diyl]]bis(cyclohexylamino)-2,1-ethandiy]]bis[3,3,5,5-tetramethyl-] (9CI) (CA INDEX NAME)

L5 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L5 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1985:186021 CAPLUS

UN 102:186021

TI Alkylated polyalkylenepolyamines, substituted oxopiperazinyl triazines and UV light-stabilized compositions

IN Lai, John Ta Yuan; Son, Pyong Ilae

PA Goodrich, B. F., Co., USA

SO PCT Int. Appl., 64 pp.

CODEN: P1XX02

DT Patent

LA English

FAM.CNT 5

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 8302913	A1	1983/09/01	WO 1983-US106	1983/01/24
W: AU, JP				
RW: BE, CH, DE, FR, GB, NL, SF				
US 4486092	A	1983/11/03	US 1982-350536	1982/02/19
AU 8313330	A1	1983/09/08	AU 1983-13330	1983/01/24
AU 573170	B2	1983/06/02		
JP 59500215	I2	1984/02/16	JP 1983-500878	1983/01/24
JP 05063475	B4	1993/09/10		
EP 101735	A1	1984/03/07	EP 1983-902629	1983/01/24
EP 101735	B1	1986/10/29		
R: BE, CH, DE, FR, GB, IT, NL, SE				
CA 1195329	A1	1985/10/15	CA 1983-421028	1983/02/07
AU 8815060	A1	1988/10/27	AU 1988-15060	1988/04/21
AU 612357	B2	1991/07/11		
PRA1 US 1982-350536		1982/02/19		
WO 1983-US106		1983/01/24		

AB The title products are prepared by reductively alkylating the terminal NH₂ groups of polyalkylenepolyamines, cyclizing with ketones to form piperazinone rings, and preparing triazine derivs. from these products. Thus, reductive alkylation of Me₂C(NH₂)CH₂NHCH₂CH₂NH₂ [96204-45-4] with 2-butanone [78-93-3] over 10% Pt/C at 80°/800 psi gave 69.5% Me₂C(NH₂)CH₂NHCH₂CH₂NHMe-sec (I) [91377-79-6]. Over 5 h 224 g 50% NaOH was added to a cooled mixture of 1.131.1. acetone [67-64-1] 101.6, CHCl₃ [67-66-3] 100.2, and 18-crown-6 catalyst 7.9 g in 200 mL CH₂Cl₂, the mixture was left overnight at -4°, warmed gradually to 5°, and left 5 h at 5° to give 71.5 g 1-[2-(sec-butylamino)ethyl]-3,3,5,5-tetramethyl-2-piperazinone (II) [91377-76-3]. Condensing 63.9 g II with 46.1 g cyanuric chloride [108-77-0] in aqueous acetone at -7° to +9° gave 77.7 g II dichlorotriazine derivative [96162-83-3], which was converted at 150° in PhMe to a II dipiperidinotriazine derivative [96204-46-5]. Polypropylene [9003-07-0] containing 0.1 phr of such a compound required 600 h Weather-O-Meter exposure for a 50% loss of tensile strength before, and 430 h after, extraction with water.

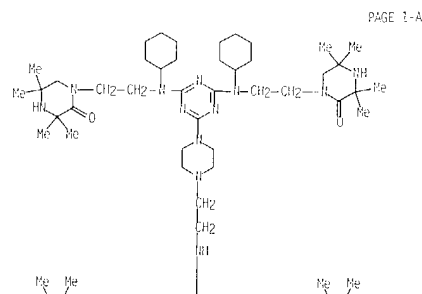
IT 96204-42-1

L5 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

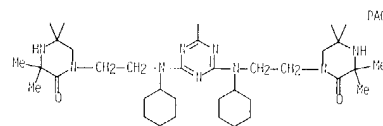
RL: PEP (Physical, engineering or chemical process); PROC (Process) (light stabilizers, for polymers)

RN 96201-42-1 CAPLUS

CH Piperazinone, 1,1'-[1,6-bis[4-[2-[[4,6-bis(cyclohexyl)[2-(3,3,5,5-tetramethyl-2-oxo-1-piperazinyl)ethyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1,1'-piperazinyl]-1,3,5-triazine-2,4-diyl]bis[(cyclohexylamino)-2,1-ethanedyl]]bis[3,3,5,5-tetramethyl- (9C1) (CA INDEX NAME)



PAGE 1-A



PAGE 2-A

L5 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1985:7684 CAPLUS

UN 102:7684

TI Piperidinyl-triazine compounds, for use as stabilizers for synthetic polymers

IN Centatore, Giuseppe

PA Ciba-Geigy S.p.A., Italy

SO Eur. Pat. Appl., 30 pp.

CODEN: EPXNDX

DT Patent

LA German

FAM.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 117229	A1	1984/08/29	EP 1984-810055	1984/01/30
R: DE, FR, GB, IT				
JP 59176278	A2	1984/10/05	JP 1984-19311	1984/02/03
PRA1 IT 1983-19310		1983/02/04		

AB Comps. or oligomers containing s-triazine, piperazine, and hindered piperidine rings are heat and light stabilizers and antioxidants for polymers. Thus, heating 465 g triacetoneamine [826-36-8] and 387 g 1-piperazineethanamine [140-31-8] with 3 g 5% Pt/C catalyst in 200 mL iso-PrOH at 80-90°/40 bar H gave 1-[2-(2,2,6,6-tetramethyl-4-piperidinyl)amino]ethylpiperazine (I) [93676-05-2]. Refluxing 100 mL xylene containing I 13.4, 2-chloro-4,6-bis[(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazine (II) [52185-43-0] 42.4, and NaOH 6 g for 20 h gave a 2:1 II-I adduct (III). Exposing polypropylene [9003-07-0] containing III 0.2, pentaerythritol tetrakis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate] 0.1, and Ca stearate 0.1 phr in a Weather-O-Meter at 63° required 1330 h for a 50% loss of tensile strength, compared with 220 without III.

IT 93676-06-3 93676-07-4 93676-08-5

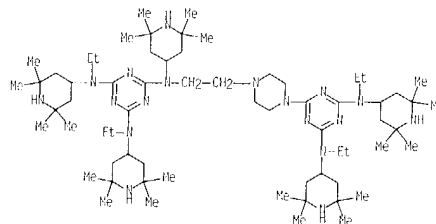
93676-10-9

RL: PEP (Physical, engineering or chemical process); PROC (Process) (heat and light stabilizers, for polymers)

RN 93676-06-3 CAPLUS

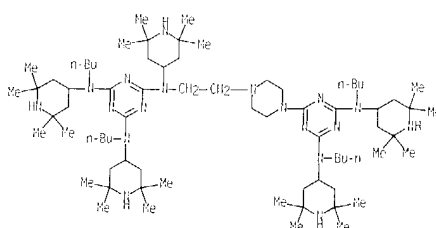
CH 1,3,5-Triazine-2,4,6-triamine, N-[2-[4-[4,6-bis[ethyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N',N''-diethyl-N,N',N''-tris(2,2,6,6-tetramethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)

L5 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 93676-07-4 CAPLUS

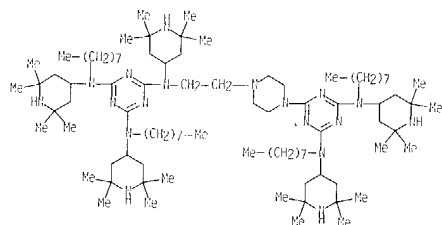
CH 1,3,5-Triazine-2,4,6-triamine, N-[2-[1-[4,6-bis[butyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N',N''-diethyl-N,N',N''-tris(2,2,6,6-tetramethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)



RN 93676-08-5 CAPLUS

CH 1,3,5-Triazine-2,4,6-triamine, N-[2-[1-[4,6-bis[octyl(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]-N',N''-diethyl-N,N',N''-tris(2,2,6,6-tetramethyl-4-piperidinyl)- (9C1) (CA INDEX NAME)

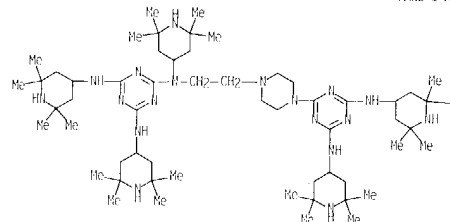
L5 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2001 ACS on STN (Continued)



RN 93676-10-9 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N-[2-[4-bis[(2,2,6,6-tetramethyl-4-piperidinyl)amino]-1,3,5-triazin-2-yl]-1-piperazinylethyl]-N,N',N''-tris(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2001 ACS on STN

AN 1982:583168 CAPLUS

DI 97:18346R

TI Poly-bis-triazinylamines for stabilizing synthetic polymers

IN Wöner, Hartmut; Pfahler, Gerhard

PA Hoechst A.-G., Fed. Rep. Ger.

SI Fur. Pat. Appl., 44 pp.

COBLN: EPXXDW

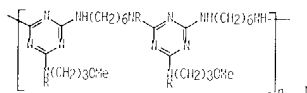
DT Patent

LA German

FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 53775	A2	19820616	EP 1981-109985	19811128
EP 53775	A3	19821006		
EP 53775	B1	19820507		
R: AT, BE, CH, DE, FR, GR, IT, NL, SE				
DE 3045839	A1	19820709	DE 1980-3045839	19801205
AT 19630	E	19860515	AT 1981-109985	19811128
AU 8176778	A1	19820610	AU 1981-78278	19811204
AU 554424	B2	19860821		
JP 57121034	A2	19820729	JP 1981 194622	19811204
JP 04006731	B4	19920206		
BR 8107905	A	19820914	BR 1981 7905	19811204
ZA 8108425	A	19821121	ZA 1981-8425	19811204
CA 1161865	A1	19840403	CA 1981-391564	19811204
PRAT DE 1980-3045839		19801205		
EP 1981-109985		19811128		

GI



AB Polymers (approx. 40) containing triazine and piperidine rings, such as polymer I (R = 2,2,6,6-tetramethyl-4-piperidyl) (II) [83420-03-51, are prepared. The polymers are useful as migration-resistant light stabilizers for synthetic polymers such as polyolefins. Thus, cyanuric chloride [108-77-0] 0.2, N-(3-methoxypropyl)-N-(2,2,6,6-tetramethyl-4-piperidinyl)amine [78014-22-9] 0.2, and N-(2,2,6,6-tetramethyl-4-piperidinyl)-1,6-hexanediamine [72215-37-5] 0.1 mol gave a monomer [83420-02-4] which was copolyd. with H2N(CH2)6NH2 to prepare the polymer II (mol. weight 3300). It was used (0.1%) as a light stabilizer in polypropylene [9003-07-0] containing 0.2% Ca stearate and 0.1% antioxidant. The polypropylene retained >50% of its initial break elongation after 1400 h in UV light, compared with 1% for polypropylene containing no light stabilizer.

L5 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2001 ACS on STN (Continued)

PAGE 1-B

Me

L5 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2001 ACS on STN (Continued)

IT 83420-21-7

RI: PEP (Physical, engineering or chemical process); PROC (Process) (light stabilizers, for polymers)

RN 83420-21-7 CAPLUS

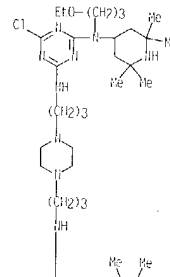
CH 1,3,5-Triazine-2,4-diamine, N,N'-(1,4-piperazinediyl)di-3,1-propanediylbis[6-chloro-N'-(3-ethoxypropyl)-N''-(2,2,6,6-tetramethyl-1-piperidinyl)-, polymer with N-(2,2,6,6-tetramethyl-4-piperidinyl)-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

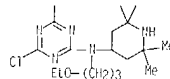
CRN 83420-20-6

CNF C44 H80 Cl2 N14 O2

PAGE 1-A



PAGE 2-A

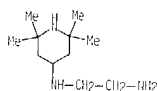


CM 2

CRN 70804-02-3

CNF C11 H25 N3

L5 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



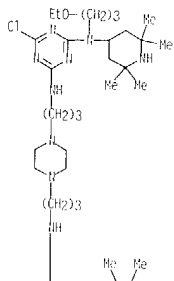
IT 83420-20-6P

RL: PREP (Preparation)
(preparation and copolymer with diamines)

RN 83420-20-6 CAPLUS

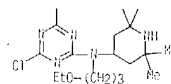
CN 1,3,5-Triazine-2,4-diamine, N,N'-(1,4-piperazinediyl-di-3,1-propanediyl)bis[6-chloro-N'-(3-ethoxypropyl)-N'-(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 2-A



L5 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1981:550709 CAPLUS

DN 95:150709

TI Triazine stabilizers

IN Wieser, Hartmut; Pfahler, Gerhard

PA Hoechst A.-G., Fed. Rep. Ger.

SO Ger., Offen., 33 pp.

CODEN: GWXXBX

DT Patent

LA German

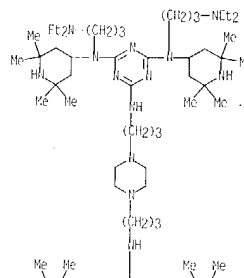
FAN, CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2944729	A1	19810514	DE 1979-2944729	19791106
EP 29522	A1	19810603	EP 1980-106702	19801031
EP 29522	B1	19840620		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
AI 8048	E	19840715	AT 1980-106702	19801031
US 4433145	A	19840221	US 1980-203236	19801103
BR 8067134	A	19810512	BR 1980-7134	19801104
JP 56075428	A2	19810522	JP 1980-154755	19801105
JP 01009995	B4	19840721		
AU 8064107	A1	19810820	AU 1980-64107	19801105
AU 535183	B2	19840308		
ZA 8006816	A	19811125	ZA 1980-6816	19801105
CA 1140926	A1	19830208	CA 1980-364001	19801105
PRAI DE 1979-2944729		19791106		
EP 1980-106702		19801031		

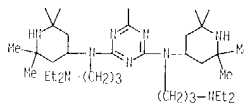
GI

L5 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AR The triazine derivs. I [y = 0, 1; x, m = 1-3; n = 2-3; Z = divalent group n.g. alkylene, (CH₂)₃Me(CH₂)₃, (substituted) phenylene; R = (substituted) piperidylamino group; R1 = CH₃, alkoxy, dialkylamino] were prepared for use as light stabilizers for polymers (test data tabulated). Thus, 1 mol. N-(2,2,6,6-tetramethyl-4-piperidinyl)-3-(diethylamino)propylamine reacted with 0.5 mol. cyanuric chloride in Me₂CO, and the product (0.01 mol.) reacted with 0.02 mol. (H₂NCH₂)₂ and powdered NaOH to give II.

IT 79112-48-4P

RL: SHN (Synthetic preparation): PREP (Preparation)
(preparation of)

RN 79112-48-4 CAPLUS

CN 1,3,5-Triazine-2,4,6-triazine, N,N'-(1,4-piperazinediyl-di-3,1-propanediyl)bis[N'-(3-ethoxypropyl)-N'-(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

=> => d que l11

L6	20	SEA FILE=CAPLUS ABB=ON PLU=ON ("EBENEZER WARREN"/AU OR "EBENEZER WARREN J"/AU OR "EBENEZER WARREN JAMES"/AU)
L7	119	SEA FILE=CAPLUS ABB=ON PLU=ON ("RUSS WERNER"/AU OR "RUSS WERNER H"/AU OR "RUSS WERNER HUBERT"/AU OR "RUSS WERNER HUBERT DR"/AU)
L8	136	SEA FILE=CAPLUS ABB=ON PLU=ON L6 OR L7
L9	102	SEA FILE=CAPLUS ABB=ON PLU=ON L8 AND AZO
L10	99	SEA FILE=CAPLUS ABB=ON PLU=ON L9 AND REACTIVE
L11	8	SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND PIPERAZIN?

=> d 1-8 bib abs

L11 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:413024 CAPLUS
 DN 140:408229
 TI Mixtures of **reactive azo** dyes, their production and their use in dyeing of material containing hydroxy- and/or carboxamido groups
 IN Ebenezzer, Warren James; Russ, Werner
 PA Dystar Textilfarben G.m.b.H. & Co. Deutschland K.-G., Germany
 SO PCT Int. Appl., 26 pp.
 COFI: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004041941	A1	20040521	WO 2003-EP12771	20031104
W: AC, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CI, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OC, OH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZH, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: BA, GB, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, EE, ES, FI, FR, GB, GR, HU, IT, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GU, GW, ML, MR, NE, SN, TD, TG				
PRAI GB 2002-26151	A	20021108		
OS MARPAT 140:408229				
GI				

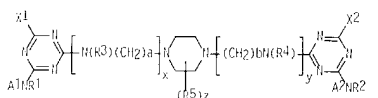
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are **reactive azo** dye mixts. comprising one or more of I (Ar1= sulfoaryl; M = H, alkali metal; X1 = labile atom or group) and one or more of II (Ar2 = sulfoaryl; M = H, alkali metal; L = mono- or divalent radical; X2 = labile atom or group; a = 1 or 2). The mixts. provide strong and economic shades on fibrous materials. In an example, 2-aminothylpiperazine and ethylenediamine were condensed with a dichlorotriazinyl dye to give a red 1:1 mixture of dyes of type I and type II.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:36726 CAPLUS
 DN 140:95572
 TI **Reactive azo** dyes, their production and their use
 IN Ebenezzer, Warren James; Russ, Werner
 PA Dystar Textilfarben G.m.b.H. & Co. Deutschland K.-G., Germany
 SO Eur. Pat. Appl., 48 pp.
 COFI: EPXXDX
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1390621	A1	20040114	EP 2003-15256	20030707
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, SI, SK, TR, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZH, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 2004107517	A1	20040610	US 2003-611438	20030701
ZA 2003005261	A	20040210	ZA 2003-5261	20030708
BR 2003002363	A	20040824	BR 2003-2363	20030708
JP 2004043909	A2	20040212	JP 2003-195297	20030710
CN 1477159	A	20040225	CN 2003-146641	20030710
PRAI GB 2002-15982	A	20020710		
OS MARPAT 110:95572				
GI				



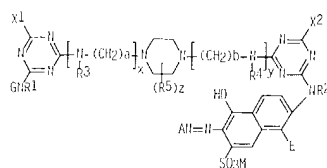
AB The invention discloses **reactive azo** dyes (I; Ar1, Ar2 = aromatic sulfo-containing azo moiety; R1, R2, R3, R4, R5 = H, optionally substituted alkyl; X1, X2 = fiber **reactive** atom or group; x, y = 0, 1 whereby at least one of x and y is 1; a, b = 2-5 and when each of x and y is 1, a > b; z = 0, 1, 2, 3, 4), processes for their preparation, and their use for dyeing and printing hydroxy- and/or carboxamido-containing fiber materials. I provide strong, bright, and economic shades on textiles. In an example, 1-(2-aminoethyl) piperazine was treated in succession with 2 different monoazo dyes each containing a dichlorotriazine group to give a disazo bis(chlorotriazine) **reactive** dye (Zmax 491 na).

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L11 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:888829 CAPLUS
 DN 137:385992
 TI **Reactive** scarlet **azo** dyes, their production and their use
 IN Ebenezzer, Warren James
 PA Dystar Textilfarben G.m.b.H. & Co. Deutschland K.-G., Germany
 SO PCT Int. Appl., 20 pp.
 COFI: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002092697	A1	20021121	WO 2002-EP4908	20020504
W: AC, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CI, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OC, OH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZH, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: BA, GB, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, DE, DK, ES, FI, FR, GR, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GU, GW, ML, MR, NE, SN, TD, TG				
EP 1307085	A1	20040211	EP 2002-753041	20020504
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, IT, LU, NL, SE, SI, SK, TR, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZH, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
BR 2002009356	A	20040608	BR 2002-9356	20020504
US 2004138125	A1	20040715	US 2003-477074	20031106
PRAI GB 2001-11573	A	20010511		
WO 2002-EP4908	A	20020504		
OS MARPAT 137:385992				
GI				



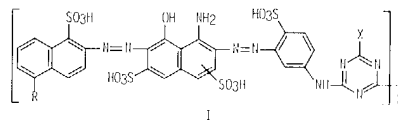
AB The invention refers to piperazine-based halotriazine **reactive** disazo dyes (I; A = optionally substituted 2-sulfonylphenyl or 1-sulfo-2-naphthyl; E = H, SO3H; G = arylazohydroxysulfonylnaphthyl; M =

L11 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
H, ammonium, alkali, alk. earth metal/2; R1-R5 = H, optionally substituted alkyl; X1, X2 = halogen; a, b = 2-5; x, y = 0, 1; z = 0-4). Scarlet 1 are prepd. with 2 different chromophores and have excellent fastness properties. In an example, a dye was prepd. starting with 1-(2-aminoethyl)piperazine and condensing with 2 different dichlorotriazinyl azo dyes.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:11/119 CAPLUS
DM 132:167667
TI **Reactive tetrakisazo dyes, their preparation and use**
IN **Ebenezer, Warren James;** Hynett, Donna Maria
PA BASF A. G., Germany
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000008104	A1	20000217	WO 1999-682447	19990726
W: BR, CN, IN, JP, KR, TR, US				
RA: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SF				
BR 9912628	A	20010502	BR 1999-12628	19990726
EP 1100847	A1	20010523	EP 1999-934987	19990726
EP 1100847	B1	20030116		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
TR 200100320	T2	20010621	TR 2001-200100320	19990726
JP 2002522587	T2	20020723	JP 2000-563731	19990726
AT 737661	E	20030515	AT 1999-934987	19990726
PT 1100847	T	20030731	PT 1999-934987	19990726
ES 2197658	T3	20040101	ES 1999-934987	19990726
US 6369121	B1	20020319	US 2001-744254	20010131
PRA1 GB 1998-16780	A	19980731		
WO 1999-682447	W	19990726		
OS HARPAT 132:167667				
GI				



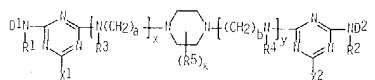
AB The dyes have the formula I [each R = H, SO₃H; each X = F, Cl, (un)substituted pyridinium; Y = NR₁R₂? (with 1 exception), NR₃RS; R₁ R₃ = C1-4 alkyl, C1-4 aminoalkyl, C1-4 hydroxyalkyl, or R₁R₂ completes a heterocycle; Z = (un)substituted C5-12 cycloalkylene or C5-12

L11 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
(hetero)arylene, ≥2 such groups linked together; (un)substituted (un)interrupted (by N, O, S, or such a cyclic group) C1-15 alkylene or C2-15 alkenylene) or are salts of such 1. Thus, H acid Ha salt was coupled with diazotized 2,4-H₂N(AcNH)C₆H₃SO₃H and the product was coupled with diazotized 2,1,5-H₂N(C₁₀H₅(SO₃H)₂ to give a disazo compd., which was deacetylated and condensed with cyanuric chloride, and the resulting dichlorotriazine deriv. was condensed 2:1 with EtNHCH₂CH₂NHEt to give a 1, λ_{max} 616 nm, which dyed cotton in a fast greenish navy shade.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:96317 CAPLUS
DM 130:154986
TI **Reactive dyes containing a piperazine residue, their preparation and use**
IN **Ebenezer, Warren James;** Hynett, Donna Maria
PA BASF A. G., Germany
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9905224	A1	19990204	WO 1998-682162	19980720
W: BR, CN, ID, JP, KR, TR, US				
RA: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 998531	A1	20000510	EP 1998-935169	19980720
EP 998531	B1	20020306		
R: CH, DE, ES, FR, GB, IT, LI, PT				
BR 9811035	A	20000801	BR 1998-11035	19980720
TR 200000277	T2	20000921	TR 2000-200000277	19980720
JP 2001510875	T2	20010807	JP 2000-504205	19980720
PT 998531	T	20020830	PT 1998-935169	19980720
ES 2173604	T3	20021016	ES 1998-935169	19980720
CN 1102947	B	20030317	CN 1998-807524	19980720
RU 568940	B	20010101	RU 1998-8112140	19980720
US 6248871	B1	20010619	US 2000-462500	20000124
PRA1 GB 1997-15830	A	19970725		
WO 1998-682162	W	19980720		
OS HARPAT 130:154986				
GI				



AB The dyes have the formula I [D1, D2 = azo chromophoric group; R1-R4 = H, (un)substituted alkyl; each R5 = alkyl; X1, X2 = labile atom group; a, b = 1-5; x, y = 0, 1; (x + y) ≥ 1; z = 0-4]. They can be prepared by reacting a piperazine derivative with resp. equimolar quantities of 2 triazine ring-containing reactive azo dyes or with 2 mol of a single reactive azo dye. For coloration of a substrate the dyes can be applied at pH > 7 by, for example, exhaust dyeing, padding, or printing. Thus, an aqueous solution of 0.021 mol 7-[[4-(dichlorotriazinylamino)-2-ureidophenyl]azo

L11 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 J-1,3,6-naphthalenetrifluoronic acid was added over 15 min to an aq. soln.
 of 0.01 mol 1-(2-aminoethyl)piperazine at room temp. and kept
 overnight to give a I with λ_{max} 426 nm.
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE.FORMAT

L11 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1997-6072 CAPLUS
 DR 126:33021
 TI **Reactive azo dyes and dyeing therewith**
 IN Hutchings, Michael Gordon; Brennan, Colin Michael; Tallant, Neil Anthony;
 Shawcross, Andrew Paul; Patel, Prakash; **Ebenezer, Warren James**
 PA Zeneca Limited, UK; Hutchings, Michael Gordon; Brennan, Colin Michael;
 Tallant, Neil Anthony; Shawcross, Andrew Paul; Patel, Prakash; Ebenezer,
 Warren James
 SO ICT Int. Appl., 46 pp.
 CODEN: PIXXDZ
 DT Patent
 LA English
 FAI.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9635012	A1	19961107	WO 1996-GB867	19960409
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, C7, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NY, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KC, LS, MW, SD, SZ, US, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
AU 9652836	A1	19961121	AU 1996-52836	19960409
EP 826084	A1	19960304	EP 1996-909274	19960409
R: DE, GB, IT				
JP 11504375	T2	19990420	JP 1996-533093	19960409
EP 1013818	A2	20000628	EP 2000-104363	19960409
EP 1013818	A3	20010110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LT, LU, NL, SE, MC, PT, IE, FI				
TW 428013	B	20010401	TW 1996-85104251	19960410
ZA 9602986	A	19961106	ZA 1996-2986	19960415
US 5976197	A	19991102	US 1998-952170	19980130
PRAI GB 1995-9295	A	19950506		
GR 1995-10687	A	19950525		
EP 1996-909274	A3	19960409		
WO 1996-GB867	W	19960409		
OS MANKAT 126:33021				

AR **Reactive azo dyes and their salts** are used to color substrates. The process comprises applying to the substrate the water-soluble dye having ≥ 2 electrophilic groups and a nucleophilic agent having mol. weight < 600 and at least one selected from aliphatic primary amino groups and secondary amino groups. The nucleophilic agent improves fixation and reduces the need for rinsing. In an example, orange 4-(B-sulfatoethylsulfonyl)aniline-7'-ureylenebis(4-hydroxy-2-naphthalenesulfonic acid) (λ_{max} 482 nm) was prepared and applied to cotton using tris(2-aminoethyl)amine as the nucleophilic agent.

L11 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L11 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995-931261 CAPLUS
 DR 173:316756
 TI **Aminated cellulosic synthetic fibers and method for preparation of dyed textiles from rayon and cellulose derivatives and amines.**
 IN Schrell, Andreas; **Russ, Werner Hubert**; Huber, Bernd
 PA Hoechst A.-G., Germany
 SO Eur. Pat. Appl., 15 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAI.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 665311	A1	19950802	EP 1995-100299	19950111
EP 665311	B1	19981209		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, SE				
DE 4402711	A1	19950803	DE 1994-4402711	19940129
DE 4422753	A1	19960104	DE 1994-4422758	19940629
AT 174388	E	19981215	AT 1995-100299	19950111
LS 2126794	T3	19990401	ES 1995-100299	19950111
FI 9500313	A	19950730	FI 1995-343	19950126
US 5694141	A	19971104	US 1995-378600	19950126
CA 2111267	AA	19950730	CA 1995-2141267	19950127
CN 1109925	A	19951011	CN 1995-101673	19950127
JP 07300719	A2	19951114	JP 1995-11863	19950127
US 5866858	A	19990202	US 1997-963683	19971031
PRAI DE 1994-4402711	A	19940129		
DE 1994-4422758	A	19940629		
US 1995-378600	A3	19950126		

AB The title fibers comprise an amino-substituted cellulose derivative polymer from an olefinic unsatd. amine and cellulose or cellulose components or the amino-substituted cellulose reaction product from cellulose or cellulose components with N-heterocycloalkyl ester derivative or an N-aminohydroxyalkyl ester derivative, the amino-, hydroxy-, and ester group can be on the primary, secondary or tertiary C-atom of the alkyl group. These fibers are dyed with **reactive dyes** giving deep shades with good fastness. N-(2-sulfatoethyl)piperazine-modified hydroxyethyl cellulose and spinning viscose were mixed, spun into fibers, and dyed with a red **azo reactive dye** gave a dyeing with a deep red shade and good color depth and good fastness properties.

111 ANSWER 8 Q1 8 CAPLUS COPYRIGHT 2004 ACS on SIM

AN 1995:538231 CAPLUS

DN 172:268059

T1 Process for printing and dyeing of textiles with anionic dyes and printed and dyed textiles from

IN Von der Eltz, Andreas; Schnell, Andreas; Russ, Werner Hubert

PA Hoechst A. G., Germany

SU Eur. Pat. Appl., 20 pp.

CODE: EPXXXX

DI Patent

LA German

FILED 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 613977	A1	1994-10-27	EP 1994-102779	1994-10-27
EP 613977	B1	2001-06-13		
R: AT, CH, DE, FR, GB, IL, LI				
DE 4306432	A1	1994-10-27	DE 1993-4306432	1993-10-30
JP 06299476	A2	1994-10-25	JP 1994-30236	1994-02-28
US 5512061	A	1996-04-30	US 1994-204773	1994-03-02
PRA1 DE 1993-4306432	A	1993-10-30		

US HARPAT 122:268059

AB Title process, especially for cotton, comprises printing the textile with an aqueous solution containing an alkali fixing agent and a compound containing a primary, secondary, or tertiary amine or quaternary ammonium group which can be a component of a heterocycle, fixing to modify the textile surface, and dyeing, e.g. **reactive**, the modified textile at time using an exhaust or pad process. The process with a one color pattern does not give effluents containing salt, the neutral dye solution can be optionally concentrated, and no printing dye is needed. A cotton textile was printed with a paste contg NaOH and (2-sulfoethyl)piperazine, dried, steamed, rinsed, and dyed in a bath containing a **reactive azo**-anthraquinone dye and no electrolyte giving a blue-black shade.

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Page 67

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